Operation, Maintenance, and Monitoring (OM&M) 2011 Annual Report for

Ventron/Velsicol Superfund Site Operable Unit 1 Wood-Ridge and Carlstadt, New Jersey

(USEPA No. NJD980529879)

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Prepared for:

Rohm and Haas Chemicals, LLC.

Prepared by:

PARSONS

308772

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List of Acronyms and Abbreviations

CEA	Classification Exception Area
CF	Contaminant Flux
EC	Engineering Controls
IAQ	Indoor Air Quality
IC	Institutional Controls
LFPS	Low-flow purge and sample
$\mu g/l$	micrograms per liter
NJDEP	New Jersey Department of Environmental Protection
ng/m^3	nanograms per cubic meter
OM&M	Operation Maintenance and Monitoring
OU-1	Operable Unit 1
RAW	Remedial Action Workplan
USEPA	United States Environmental Protection Agency
VBW	Vertical Barrier Wall

1.0 – Introduction

This report summarizes the status of OM&M activities being performed as described in the Operation, Maintenance and Monitoring Plan for Engineering and Institutional Controls submitted in July 2011 for the Ventron/Velsicol Superfund Site Operable Unit 1 (Site) in Wood-Ridge, New Jersey. The report was prepared on behalf of Morton International, Inc. ("Morton") with the assistance of ENVIRON International Corporation (ENVIRON), the environmental consultant for the Custodial Trust. The Custodial Trust is a trust established pursuant to an order entered on August 9, 2002 by United States Bankruptcy Court approving the formation of the Custodial Trust and Settlement Agreement in the United States Bankruptcy Court for the District of Delaware, In Re Fruit of the Loom, Inc. (No. 9904497). The remedial actions were completed at the Site as summarized in the Remedial Action Report submitted to the United States Environmental Protection (USEPA) and New Jersey Department of Environmental Protection (NJDEP) on April 15, 2011. This report summarizes the first year of OM&M activities completed between January 1, 2011 and December 31, 2011. This report was prepared in general accordance with the requirements for reporting included in N.J.A.C. 7:26E-6.7.

The OM&M items for the Institutional Controls (ICs) were as follows:

- Deed Notices;
- Contaminant Flux Monitoring Program;
- Air Quality Monitoring in the Wolf Warehouse;
- Classification Exception Area (CEA) Sampling; and
- Vertical Barrier Wall Effectiveness Evaluation.

The OM&M items for the Engineering Controls (ECs) were as follows:

- General Site Inspection;
- Developed Area Caps Inspection;
- Undeveloped Area Cap Inspection;
- Vertical Hydraulic Barrier Wall Inspection;
- Erosion and Sediment Control Inspection; and
- West Ditch and 55-foot Buffer Inspection.

This report summarizes the OM&M activities completed in 2011 for the monitoring and maintenance of the institutional and engineering controls, OM&M activities to be performed next period, and recommendations for future rounds of OM&M.

2.0 – OM&M for Institutional Controls

2.1 Deed Notices

The establishment of deed notices was stipulated for the following properties:

- Wolf Warehouse;
- U.S. Life Warehouse (Reddy Raw);
- Undeveloped Area;
- Prince Packing;
- Blum;
- EJB;
- Ethel Boulevard; and
- Norfolk Southern Railroad.

Properties were inspected quarterly for the excavation or disturbance of soil. The properties were inspected March 15, June 30, September 20, and December 2, 2011. A log of the deed notice inspections is provided in **Table 1**. A figure of the deed notice properties is presented as **Figure 1**. The deed notice field forms indicate that the properties inspected were in acceptable condition. The following comments were noted during the deed notice inspections, but do not require any action at this time:

- On June 30, 2011 at the U.S. Life Warehouse (Reddy Raw) property, there were disturbances to the asphalt parking area from repairs made to the stormwater drain on the north side of the warehouse. The work appeared completed at the time of the inspection and the extent of intrusive work was limited to within two feet of the drain and associated piping.
- On September 20, 2011 at the Prince Packaging property, there were surface disturbances near the office that were potentially related to drainage work, however, no action was recommended due to the limited nature of the work.
- On December 2, 2011 at the U.S. Life Warehouse property, work on the rail spur caused the rail track to be raised. The work appeared completed at the time of the inspection and the extent of intrusive work was limited.
- Minor soil erosion on the undeveloped area cap noted on March 15, June 30, September 20, and December 2, 2011 is discussed further in Section 3.5 Erosion and Sediment Control Inspection.

Deed notice inspection forms are provided in **Appendix A**. Based upon the Site inspections, the deed notices are being properly maintained at this time.

2.2 Contaminant Flux Monitoring Program

The monitoring of contaminant flux from groundwater to surface water and sediment was performed on a semiannual (twice per year) basis. This section presents the two main components of contaminant flux monitoring which include the following;

- Synoptic water level measurements, collection, and analysis of groundwater samples; and

- Framework for the future contaminant flux analysis after a minimum of a three-year equilibration period.

The locations of the contaminant flux monitoring wells and piezometers are presented in **Figure 2**.

To date, the first component, a baseline sampling program consisting of the semiannual collection and analysis of groundwater samples from on-site wells is ongoing. Samples were collected using NJDEP's low-flow purge and sample (LFPS) methods. This program will continue during the initial three-year equilibration period. Prior to each sampling event, synoptic water level measurements were obtained on March 14, 2011 and September 6, 2011 from 12 contaminant flux (CF) monitoring wells and four piezometers on-site:

- CF-MW-1
- CF-MW-2
- CF-MW-3
- CF-MW-4
- CF-MW-5
- CF-MW-6
- CF-MW-7
- CF-MW-8
- CF-MW-9
- CF-MW-10
- CF-MW-11
- CF-MW-12
- CF-PZ-1
- CF-PZ-2
- CF-PZ-3
- CF-PZ-4

Groundwater samples were collected from March 14 through March 18, 2011 (Quarter 1) and September 6, 2011 through September 9, 2011 (Quarter 3) from 12 CF monitoring wells installed along the downgradient perimeter of the Site near Berry's Creek:

- CF-MW-1
- CF-MW-2
- CF-MW-3
- CF-MW-4
- CF-MW-5
- CF-MW-6
- CF-MW-7
- CF-MW-8
- CF-MW-9
- CF-MW-10
- CF-MW-11
- CF-MW-12

Sampling was performed to coincide with the CEA and vertical barrier wall well sampling to minimize duplication of sampling efforts. In Quarter 1 (the first sampling event), a full TCL/TAL analysis was performed on each sample (per USEPA requirement; see Comment 18, in USEPA's July 2, 2009 comment letter). In the subsequent groundwater monitoring events, samples were analyzed only for arsenic, benzene, and mercury, the three Site-related Contaminants of Concern (COC), as specified in the OM&M Plan. Results of the contaminant flux sampling are presented in **Table 2**.

In addition, filtered groundwater samples were analyzed for Site-related COCs when the total metals concentration was above the respective GWQC. The filtered data provide another line of evidence for the interpretation of the total metals results. In Quarter 1, neither arsenic nor mercury exceeded their respective GWQC. In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. To form a more comprehensive picture of COC concentrations, starting in Quarter 1 of 2012 arsenic will also trigger a dissolved metals analysis; however, the dissolved metals analysis will only be run on the compound that was over the GWQC.

For each contaminant flux groundwater sampling event, data validation was conducted on 50 percent of the contaminant flux monitoring groundwater samples submitted for analytical analysis in accordance with the current NJDEP validation standard operating procedures (SOPs), and USEPA Region 2 SOPs for Data Validation for the respective methods. The case narratives were reviewed for the other 50 percent of groundwater samples for any performance issues the laboratory reported. No data quality noncompliance issues were reported by the laboratory. The data usability reports are included as **Appendix B**.

The second component of contaminant flux monitoring is to evaluate the flux to Berry's Creek. This evaluation will be performed after a minimum three-year equilibration period following the remedial action completion date of April 2011. As described in the Developed Area RAW, the solute flux rate of COCs to Berry Creek will be calculated by multiplying the solute concentration of water passing through a defined cross-section by the water flux rate passing through that same cross-section. The fluxes will be evaluated in 10 segments centered on the 10 proposed perimeter monitoring wells (CF-MW-2 through CF-MW-11) along Berry's Creek and Diamond Shamrock/Henkel Ditch (North). This approach is similar to the method used to evaluate flux rates of inorganics in the Feasibility Study Report, pages 4-28 and 4-29.

According to N. J. A. C. 7:9B Surface Water Quality Standards, Berry's Creek is classified as FW2-NT/SE2, which signifies the waterway may have a salt water/fresh water interface. As a result, the calculated COC solute concentrations will be compared to both the Fresh Water (FW2) and the Saline Water (SE) Criteria for human health.

2.3 Air Quality Monitoring in the Wolf Warehouse

Indoor air quality at the Wolf Warehouse was monitored for total atmospheric mercury consisting of gas-phase and particulate concentrations on an annual basis. Indoor air samples were collected on August 30 and 31, 2011 (Quarter 3) from four locations, which included three indoor samples, one indoor duplicate sample, and one outdoor (ambient) sample. A building survey was performed before the sampling event to identify any building conditions that needed to be accounted for during the air monitoring event. The samples were collected over a 24-hour period in the breathing zone approximately four feet above ground/floor surfaces.

Indoor air quality (IAQ) measurements of temperature, relative humidity, and barometric pressure were performed at each of the four sampling locations. These measurements were made with a TSI Model No. 8554 IAQ meter.

The mercury sampling methodology used was the *Frontier Geosciences Sorbent Total Mercury Method – Total Gaseous Mercury capture on Iodated Carbon (FGS-009)*. This is a peer-reviewed method developed by Frontier Geosciences, Inc., an analytical laboratory that specializes in low-level mercury analysis. This method was used in previous sampling for mercury in and around the Wolf Warehouse. The method collects gas-phase and particulate-phase atmospheric mercury species by trapping on an iodated carbon matrix. After sampling, the mercury was leached off the iodated carbon using a hot-refluxing HNO_3/H_2SO_4 solution, followed by further oxidation using a BrCl solution. Aliquots of the digest were analyzed via *USEPA Method 1631 - Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry*.

The results indicated that the indoor mercury concentration ranged from 53 to 167 ng/m^3, with an average of 115 ng/m^3 (not including duplicate), compared to a lower outside concentration of 4 ng/m^3. These results were below the New Jersey indoor reference value of 300 ng/m^3. A technical memorandum summarizing the results of this sampling event is included as **Appendix C**.

2.4 Classification Exception Area (CEA) Sampling

Groundwater sampling was conducted on a semiannual basis to ensure the protectiveness of the CEA. Groundwater samples were collected from monitoring wells between March 14 and March 18, 2011 (Quarter 1), between September 6 and September 8, 2011 (Quarter 3). One CEA well, MW-11, could not be located for the first three quarters of 2011, but was eventually found in October 2011. MW-11 was re-developed by a licensed New Jersey driller in November 2011, and sampled on December 6, 2011 (Quarter 4). The samples were collected using NJDEP's LFPS methods. The wells sampled were as follows:

- CF-MW-1
- CF-MW-2
- CF-MW-3
- CF-MW-4
- CF-MW-5
- CF-MW-6
- CF-MW-7
- CF-MW-8
- CF-MW-9
- CF-MW-10
- CF-MW-11
- CF-MW-12
- BW-MW-1
- BW-MW-2
- BW-MW-3
- BW-MW-4
- BW-MW-5
- BW-MW-6
- BW-MW-7
- BW-MW-8
- MW-10
- MW-11 (Quarter 4 only)

Two CEA wells were not sampled in 2011; MW8 could not be located, and MW2 was damaged. MW8 was previously located adjacent to the gate at the northwest corner of the Randolph Products Property. See Section 5.0 for the recommended actions for MW-8 and MW-2 wells. The barrier wall wells BM-MW-1 through BM-MW-8 were sampled on a quarterly basis to evaluate vertical barrier wall effectiveness as discussed in Section 2.5. However, for the purpose of the CEA, only the Quarter 1 and Quarter 3 barrier wall results were considered. The locations of the CEA wells are presented in **Figure 3**.

For the groundwater samples where inorganic COC concentrations exceeded the Site-related GWQC, metals analysis was run on a filtered groundwater sample (providing a dissolved metal result). In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis (for both arsenic and mercury) to be run. In Quarter 3, only mercury triggered the dissolved metals analysis (for both arsenic and mercury) to be run, and the filtered sample was not run if only arsenic exceeded the Site-related GWQC. To form a more comprehensive picture of COC concentrations, starting in Quarter 4 arsenic also triggered a dissolved metals analysis; however, the dissolved metal analysis was only run on the compound that was over the GWQC.

The CEA analytical results are presented in **Figure 3**. The presented results show the total metal concentrations and the dissolved metal concentrations, when applicable. The summary of the CEA groundwater sampling results is presented in **Table 3**. The CEA sampling results will be used during the future biennial certification of the CEA.

For each CEA groundwater sampling event, data validation was conducted on 50 percent of the CEA groundwater samples submitted for analytical analysis in accordance with the current NJDEP validation standard operating procedures (SOPs), and USEPA Region 2 SOPs for Data Validation for the respective methods. The case narratives were reviewed for the other 50 percent of groundwater samples for any performance issues the laboratory reported. No data quality noncompliance issues were reported by the laboratory. The data usability reports are included as **Appendix B**.

<u>Quarter 1 Results</u>

In Quarter 1, a full TCL/TAL analysis was performed on each sample during the first sampling round (per USEPA requirement, see Comment 18 in the July 2, 2009 comment letter). The full TCL/TAL groundwater sampling results are presented in **Table 4**. In subsequent groundwater sampling events, samples were analyzed only for arsenic, benzene, and mercury, the three Site-related Contaminants of Concern (COC), as specified in the OM&M Plan. In Quarter 1, the results for total arsenic in five wells (BW-MW-1, BW-MW-2, BW-MW-6, BW-MW-7, and BW-MW-8) exceeded the arsenic GWQC. In three wells (BW-MW-2, BW-MW-4, and CF-MW-9) the results exceeded the benzene GWQC. Four wells (BW-MW-1, BW-MW-4, BW-MW-8, and MW-10) produced results for total mercury that exceeded the mercury GWQC. The dissolved metals analysis was run on a filtered groundwater sample for the following wells:

- BW-MW-1
- BW-MW-2
- BW-MW-4
- BW-MW-6
- BW-MW-7
- BW-MW-8
- MW-10

In the filtered groundwater samples, all but one well, BM-MW-1, produced results that were less than the GWQC for arsenic and mercury. Only BW-MW-1 exceeded the Site-related COCs GWQCs in both the unfiltered and filtered groundwater sample.

The groundwater in five wells (BW-MW-2, BW-MW-3, BW-MW-6, BW-MW-7, and BW-MW-8) contained chemical concentrations that exceeded the GWCC for one or more organic compounds (e.g., benzene, cis-1,2-dichloroethene, benzo[k]flouranthene, bis(2-ethylhexyl) phthalate, hexachlorobutadiene, and vinyl chloride). The groundwater concentrations in each of the CEA wells exceeded the GWQC for one or more of eight metals (arsenic, aluminum, beryllium, iron, lead, manganese, mercury, and sodium). With the exception of arsenic, benzene, and mercury, none of these compounds are historical COCs at the Site.

Quarter 3 Results

In Quarter 3, the results for total arsenic from eleven wells (BW-MW-2, BW-MW-3, BW-MW-4, BW-MW-5 BW-MW-6, BW-MW-7, BW-MW-8, CF-MW-1, CF-MW-2, CF-MW-3, and CF-MW-8) exceeded the arsenic GWQC. Four wells (BW-MW-2, BW-MW-4, BW-MW-5, and CF-MW-9) exceeded the benzene GWQC. The total mercury results from five wells (BW-MW-1, BW-MW-8, CF-MW-5, CF-MW-6, and MW-10) exceeded the mercury GWQC. For the groundwater samples where mercury concentrations exceeded the Site-related GWQC, the dissolved metals analysis was run on a filtered groundwater sample for the following wells:

- BW-MW-1
- BW-MW-8
- CF-MW-5
- CF-MW-6
- MW-10

None of the results from the filtered groundwater samples listed above exceeded the mercury GWQC.

Quarter 4 Results

In Quarter 4, only MW-11 was sampled since it could not be located for the first three quarters of 2011. A full TCL/TAL analysis was performed on MW-11 to be consistent with the first sampling event for the other on-site monitoring wells. The Quarter 4 results were included as part of the CEA results. The total arsenic result for MW-11 exceeded the arsenic GWQC, and the dissolved arsenic analysis was run on the filtered groundwater sample. In the filtered groundwater sample, MW-11 did not exceed the arsenic GWQC.

2.5 Vertical Barrier Wall Effectiveness

The effectiveness of the vertical barrier wall (VBW) is to be evaluated by assessing the trends in the concentrations of mercury in groundwater monitoring wells installed immediately outside the barrier wall. According to the Developed Area RAW, the evaluation of the effectiveness of the vertical barrier wall will be performed between three and five years after installation of the monitoring wells (November 2010) around the vertical barrier wall, but at a minimum, prior to or during the first CERCLA five-year statutory review for the Ventron/Velsicol OU-1 Site. To date, a baseline sampling program consisting of the semi-annual collection and analysis of groundwater samples from the barrier wall wells has been conducted. The samples were collected using NJDEP's LFPS methods.

In addition, groundwater elevation data from piezometers inside the vertical barrier wall were monitored and these data provide an indication of the potential for overtopping of the barrier wall under the concrete cap that covers the area encompassed by the barrier wall.

Groundwater Elevations in Piezometers

Groundwater elevations were collected from the following eight piezometers at a minimum on a monthly basis:

- BW-PZ-1
- BW-PZ-2
- BW-PZ-3
- BW-PZ-4
- BW-PZ-5
- BW-PZ-6
- BW-PZ-7
- BW-PZ-8

Additional groundwater elevation levels were taken from the barrier wall piezometer when site maintenance activities, inspections, or containment water collection tank water disposal events occurred. The vertical barrier wall well and piezometer locations are presented in **Figure 4**. The barrier wall piezometer groundwater elevations are presented in **Table 5**. These groundwater elevations were compared to the top of the VBW elevations to evaluate the potential overtopping of the wall.

An overtopping evaluation was used to implement groundwater removal activities from within the wall as part of on-going maintenance. The groundwater removal maintenance activity consists of periodically pumping water from two containment water collection tanks that collect groundwater inside the barrier wall. Results of the groundwater elevation evaluation are presented in **Appendix D.**

In 2011, on the western portion of the VBW, groundwater elevations in the piezometers (inside of the wall) exceeded the elevations of the top of the VBW. This condition may be due to potential mounding under the Wolf Warehouse, and it will continue to be monitored in 2012. Periodically, groundwater elevations in the monitoring wells outside this portion of the VBW also exceeded the elevations of the top of the VBW. It was also noteworthy that Hurricane Irene impacted the Site on August 28, 2011 and the following week. Heavy rainfall, flooding, and a storm surge resulted in significant water throughout the region. Measurements in the monitoring wells and piezometers indicated spikes in groundwater levels after these events. This resulted in several monitoring well and piezometer locations with groundwater elevations within one foot of the top of the VBW on August 29, 2011 and September 6, 2011. The pumping frequency from the containment water collection tanks were increased and by September 13, 2011 the groundwater levels were trending lower inside the VBW.

In 2012, groundwater elevations at selected monitoring well and piezometer barrier wall locations along the western portion of the VBW will be evaluated against several factors. The evaluation will include an analysis of groundwater levels versus time, groundwater level interactions with the VBW french drain system, groundwater levels versus containment water collection tank pump-out events, and groundwater levels versus storm events. Potentiometric maps of the barrier wall region may also be developed to support the evaluation. Recommendations for additional investigations maybe developed based on these evaluations.

Mercury Concentrations in Groundwater

Groundwater samples were collected from the following eight barrier wall wells between March 14 and 18, 2011 (Quarter 1), June 28 and 29, 2011 (Quarter 2), September 6 and September 8, 2011 (Quarter 3), and December 5 and 6, 2011 (Quarter 4) to build a baseline data set that will be used to determine, in the future, if there is a significant trend in total mercury concentration in the groundwater:

- BW-MW-1
- BW-MW-2
- BW-MW-3
- BW-MW-4
- BW-MW-5
- BW-MW-6
- BW-MW-7
- BW-MW-8

In Quarter 1, a full TCL/TAL analysis was performed on each sample during the first sampling round (per USEPA requirement, see Comment 18 in USEPA's July 2, 2009 comment letter). In the subsequent groundwater monitoring events, barrier wall wells were analyzed for mercury in Quarter 2 and Quarter 4. When CEA sampling coincides with barrier wall sampling, as in Quarter 3, the barrier wall wells were analyzed for arsenic, benzene, and mercury, the three Site-COCs. However, for the purpose of barrier wall effectiveness, only the mercury results were considered. Results of the barrier wall sampling are presented in **Table 6**. For groundwater samples where mercury concentrations exceeded the Site-related GWQC, a dissolved mercury analysis was run on a filtered groundwater sample. Dissolved mercury analysis was run for the following wells:

Quarter 1:

- BW-MW-1
- BW-MW-2
- BM-MW-4
- BW-MW-6
- BW-MW-8

Quarter 2:

- BW-MW-1
- BW-MW-4
- BW-MW-8

Quarter 3:

- BW-MW-1
- BW-MW-8

Quarter 4:

- BW-MW-1
- BW-MW-2
- BW-MW-8

The VBW analytical results, total metal concentrations and/or the dissolved metal concentrations, if applicable, are posted in **Figure 4**. Trends in mercury concentrations (i.e., evaluation of the VBW effectiveness) will be evaluated after an equilibration period of three to five years after the installation of the barrier wall monitoring wells has elapsed. Therefore, between November 2013 and November 2015, the groundwater sampling results analysis at the barrier walls wells will be initiated using the Mann-Whitney U-Test or comparable statistical method to determine if mercury concentrations show a trend over time.

For each VBW groundwater sampling event, data validation was conducted on 50 percent of the groundwater samples submitted for analytical analysis in accordance with the current NJDEP validation standard operating procedures (SOPs), and USEPA Region 2 SOPs for Data Validation for the respective methods. The case narrative was reviewed for the other 50 percent of groundwater samples for any performance issues the laboratory reported. No data quality noncompliance issues were reported by the laboratory. The data usability report is included as **Appendix B**.

3.0 – OM&M for Engineering Controls

3.1 General Site Inspection

A general Site inspection was conducted on a quarterly basis on March 25, June 30, September 20, and December 2, 2011. This inspection evaluated general Site conditions, routine maintenance requirements, and Site security. The general Site inspection included a visual inspection of the condition of the fencing, gates, Site signs, access roads, stormwater control features, and erosion control measures. The Site inspection forms are included in **Appendix E**.

In 2011, housekeeping and access roads were in acceptable condition, and no maintenance was required. On March 25, 2011 (Quarter 1), the Ethel Boulevard property was missing signage. As a maintenance action, signage from the Randolph Products property was moved to the Ethel boulevard entrance. For the remainder of 2011, the Ethel Boulevard property had the appropriate signage. The perimeter chain-link fencing, gates and locks for the Ethel Boulevard property were in acceptable condition. No maintenance to these Site security maintenance components was required.

3.2 Developed Area Caps Inspection

The integrity of the various developed area caps was inspected on a quarterly basis. The undeveloped area cap was examined as part of the general Site inspections performed on March 25, June 30, September 20, and December 2, 2011.

Inspections have two objectives:

- Monitor any deterioration or cracking of the concrete cap surrounding the Wolf Warehouse and the foundation/floor of the Wolf Warehouse that would potentially allow for groundwater or vapor intrusion in the area; and
- Monitor general conditions of the various cap types to verify they were providing sufficient protection against direct contact of the underlying soils by potential receptors.

The following cap areas were inspected:

- Wolf Warehouse foundation, parking areas, and railroad siding;
- US Life Warehouse parking lots and railroad siding;
- EJB parking lots;
- Ethel Boulevard; and
- Norfolk Southern railroad spur.

Minor surface cracking was noted in the exterior concrete cap on the perimeter of Wolf Warehouse at several locations but did not require maintenance during the inspections. The cracks appeared to be from stress and were surficial in nature. Selected cracks will be sealed in the spring of 2012.

In 2011, the other properties' caps were in acceptable condition. Only the EJB property asphalt and U.S. Life Warehouse properties had minor potholes and surficial cracking. These potholes and cracks do not require maintenance at this time.

3.3 Undeveloped Area Cap Inspection

The undeveloped area cap was inspected on a quarterly basis as part of the general Site inspections performed on March 25, June 30, September 20, and December 2, 2011. The cap was inspected for the following conditions:

- Unauthorized vehicle or equipment traffic on the cap area;
- Erosion or excessive settlement;
- Burrowing or digging wildlife; and
- Undesirable vegetation.

No undeveloped area cap unauthorized vehicle traffic, burrowing wildlife disturbances or excessive settlement of the soil capping system was observed. Minor phragmites growth was observed along Berry's creek and the undesirable vegetation was treated in October 2011. Erosion issues are discussed further in Section 3.5 Erosion and Sediment Control Inspection.

3.4 Vertical Hydraulic Barrier Wall Inspection

The vertical barrier wall was inspected on a monthly basis. The vertical barrier wall was regularly examined during containment water collection tank water disposal activities and as part of the general Site inspections performed on March 25, June 30, September 20, and December 2, 2011. The vertical barrier wall was inspected for the following conditions:

- Damage from vehicles or equipment crossing the barrier wall (i.e., broken surface pavement, subsidence, etc.);
- Excessive settlement; and
- Underground contaminant water collection tank level monitoring.

No damage to the vertical barrier wall from vehicle traffic, or excessive settlement was observed. Water level measurements within the containment water collection tanks located within the barrier wall were performed. A summary of the tank water removal activities is summarized in **Table 7**.

A total of 186,490 gallons of water was removed from the tanks in 2011. A total of 26,354 gallons of water was removed from the tanks between January 1 and March 31, 2011 (Quarter 1). A total of 55,411 gallons of water was removed from the tanks between April 1 and June 30, 2011 (Quarter 2). A total of 58,450 gallons of water was removed from the tanks between July 1 and September 30, 2011 (Quarter 3). A total of 46,275 gallons of water was removed from the tanks between October 1 and December 31, 2011 (Quarter 4). The amount of silt at the bottom of tanks continues to be monitored, and no silt removal is recommended at this time.

3.5 Erosion and Sediment Control Inspection

The erosion control permit requires Site inspections to be performed until vegetation is established. The inspections were typically performed on a weekly basis between January 1, 2011 and August 31, 2011. The inspections will continue on a weekly basis until Bergen County approves to reduce the frequency of inspections. In addition, an inspection event must be performed within 24 hours of a rainfall event of ½-inch or more measured at Teterboro Airport if it did not coincide with a weekly event. Inspections were not performed in January and February 2011 when the Site was covered in snow. SWPPP Erosion and Sedimentation Control forms are located in **Appendix F**.

Inspections included monitoring of culverts, swales and roof drain downspouts adjacent to the Wolf Warehouse railroad spur for buildup or blockage, inspection of pavement for signs of excessive ponding or improper drainage and inspection for signs of sediment migration.

The majority of the responses to the applicable SWPPP inspection sheet questions indicated the Site was in good condition and only minor maintenance and repairs were required. Three controls required maintenance, as described below:

- Portions of the undeveloped area subject to erosion and ponding need to be regraded and reseeded.
    - Seeding took place on May 20 and May 26, 2011. In June, there was washout of the undeveloped area cap edge uphill of the silt fence. The portion of the Site impacted by the washout was addressed with grading and backfilling on September 27, 2011 through September 29, 2011. In October, hay and seed was applied to the Site to minimize erosion. Vegetation in reseeded areas was documented to be in good condition on October 15, 2011 and throughout the rest of 2011.

- Erosion matting on the northwest portion of the berm needs to be reinstalled.
    - The need for the erosion matting to be reinstalled was first noted during the March 29, 2011 SWPPP inspection. On July 19, 2011 the old erosion mat from the West Ditch was removed from the ditch and placed in the erosion channel from where it had dislodged. The erosion mat was in good condition at the December 2, 2011 inspection. After mat installation, vegetation was growing well in the repaired areas.

- Various sections of silt fences failed and allowed sediment breakthrough and soil erosion. The needed silt fence repairs and areas subject to erosion were regraded and reseeded as described below:
    - From April through May, various sections of silt fences failed due to heavy rain and required repair. In June, silt fence supports were forced out of the ground due to dry soil conditions. In July and August, various sections of silt fences required repair due to heavy rain.
    - Tears in the silt fence and broken support stakes were repaired on March 24 and 25, May 19, May 26, June 10, June 15, June 23, July 8, July 14, August 16, August 23, and August 29, 2011.
    - On June 2, 2011, areas with little soil cover at the silt fence base were addressed and backfilled.
    - On June 30, 2011, an additional 16 stakes were added to support the silt fence, and soil was removed from the base of the fence in many areas. Additional stakes were installed for support on October 25.
    - On August 2, August 16, August 23, August 29, September 6, and September 20, 2011 rains caused sediment build-up and minor washouts. Stakes were added to support the silt fence and soil was shoveled away from the fence.

- On August 29, 2011, heavy rains from Hurricane Irene exposed the gray clay component of the cap in several areas at the Site. These repairs were addressed during the September 27 through 29, 2011 Site activities.
- Minor silt fence repairs were made on October 11, October 18, October 25, November 1, November 8, and November 22, 2011. Portions of the silt fence were sagging on December 13, and December 20, 2011. Minor repairs will be made next quarter to the silt fence.

3.6 West Ditch and 55-foot Buffer Inspection

The West Ditch and 55-foot buffer were monitored for excessive erosion, damage to the riprap, sediment buildup and vegetation growth (with focus on phragmites removal) on a quarterly basis and for habitation by burrowing animals twice per year. The inspection was performed as part of the undeveloped area cap inspections on March 25, June 30, September 20, and December 2, 2011.

The 55-foot buffer was in good condition and exhibited good vegetation growth. The West Ditch was in good condition, but required several maintenance actions. On March 25, 2011, the transition area from the grass swale to the riprap at the berm ditch to the West Ditch required additional stone. In addition, the erosion mat on the rip rap at the east side of the West Ditch needed to be rolled back. These maintenance actions were performed in Quarter 2.

In Quarters 2 and 3, heavy rains from Hurricane Irene, a tropical storm and severe thunderstorms caused washout and erosion to occur along the West Ditch. The area was hydroseeded and additional silt fence and erosion matting was installed. In Quarter 3, displaced silt material and heavy debris from washout events were removed from the ditch on August 16 and August 23, 2011. The necessary erosion repairs were made to the West Ditch on September 27 through September 29, 2011. No maintenance actions were performed on the West Ditch in Quarter 4.

4.0 OM&M Activities to be Performed in 2012

The following OM&M activities for the Institutional Controls (ICs) will be performed next year between January 1, 2012 and December 31, 2012:

- Deed Notices;
- Contaminant Flux Monitoring Program;
- Air Quality Monitoring in the Wolf Warehouse;
- Classification Exception Area (CEA) Sampling; and
- Vertical Barrier Wall Effectiveness.

The following OM&M activities for the Engineering Controls (ECs) will be performed next year between January 1, 2012 and December 31, 2012:

- General Site Inspection;
- Developed Area Caps Inspection;
- Undeveloped Area Cap Inspection;
- Vertical Hydraulic Barrier Wall Inspection;
- Erosion and Sediment Control Inspection (as required by Bergen County);
- Storm water controls; and
- West Ditch and 55-foot Buffer Inspection.

5.0 Recommendations

- At this time, OM&M activities should continue as outlined in the OM&M Plan.
- Continue to develop the data set to allow monitoring of trends in contaminant flux, the CEA, and barrier wall COC concentrations in future groundwater sampling events.
- Repair/replacement of MW2 and MW8 are not recommended at the present time. The recommendation to replace those wells is dependent on future analytical results from MW-11. At this time, the coverage from the existing well network, including MW-11, is sufficient to define the CEA.
- Additional investigation into the trends in groundwater elevations at the eight piezometer barrier wall locations and construction of the VBW french drainage system and groundwater flow around the VBW will occur in spring 2012.
- The level of silt at the bottom of containment water collection tanks should continue to be monitored; no silt removal is recommended at this time.
- Evaluate in spring 2012 the areas susceptible to erosion and/or ponding on the undeveloped area cap. Areas may require regrading or reseeding.
- Seal surficial cracks on the developed area cap.

Tables

Table 1 - Log of Deed Notice Inspections
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		Deed Notice Properties								
Quarter	Inspection Date	Wolf Warehouse Property	U.S. Life Warehouse Property	Undeveloped Area	Prince Packing Property	Blum Property	EJB	Ethel Boulevard	Southern Property	Comments/ Changes
2011 Q1	3/15/2011	X	X	X	X	X	X	X	X	None
2011 Q2	6/30/2011	X	X	X	X	X	X	X	X	Surface drain repairs on north side of U.S. Life Warehouse
2011 Q3	9/20/2011	X	X	X	X	X	X	X	X	Surface disturbances near the office on Prince Packaging property
2011 Q4	12/2/2011	X	X	X	X	X	X	X	X	Work was recently conducted on rail spur in U.S. Life Warehouse. There were no impacts to the wells or cap. Undeveloped area locations showing signs of erosion were repaired.
2012 Q1										
2012 Q2										
2012 Q3										
2012 Q4										

Note:
X = Property was inspected in the indicated quarter

Table 2 - Contaminant Flux Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-1				CF-MW-3			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110314CF-MW-1V11.81N		20110906CFMW1VN		20110316CF-MW-3V 14.0N		20110908CFMW3V13.7N	
Lab Sample No.	PQLs and		460-24087-1		460-30707-6		460-24264-8		460-30950-1	
Sampling Date	GW Quality		3/14/2011		9/6/2011 3:55:00 PM		3/16/2011		9/8/2011 11:02:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.13	U	0.13	U	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	**13**		2.3	J	**24**	
Arsenic, Dissolved	3	µg/L	NT		NR		NT		NT	
Total Mercury	2	µg/L	0.18	U	0.19	U	0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			CF-MW-2				CF-MW-4			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110317CF-MW-2V14.5N		20110909CFMW2V14.5N		20110316CF-MW-4V12.8N		20110908CFMW4V12.75N	
Lab Sample No.	PQLs and		460-24309-1		460-30955-1		460-24264-7		460-30950-2	
Sampling Date	GW Quality		3/17/2011		9/9/2011 10:26:00 AM		3/16/2011		9/8/2011 11:31:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.16	J	0.13	U	0.16	J	0.14	J
METALS										
Total Arsenic	3	µg/L	2.3	U	**32**		2.3	U	2.4	J
Arsenic, Dissolved	3	µg/L	NT		NR		NT		NT	
Total Mercury	2	µg/L	0.97		0.7		0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

Notes:

Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

NR - Sample was not run for this analysis. In Quarter 1, neither arsenic or mercury exceeeded their respective GWQC. In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 2 - Contaminant Flux Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-5				CF-MW-7			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW5V13SN		20110908CFMW5V13N		20110315MW-7V14.37N		20110907CFMW7V14.0N	
Lab Sample No.	PQLs and		460-24182-7		460-30950-3		460-24182-5		460-30741-6	
Sampling Date	GW Quality		3/15/2011		9/8/2011 12:44:00 PM		3/15/2011		9/7/2011 4:11:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.27	J	0.19	J	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	2.5	
Arsenic, Dissolved	3	µg/L	NT		2.3	U	NT		NT	
Total Mercury	2	µg/L	0.69		**4.1**		0.18	U	0.21	
Mercury, Dissolved	2	µg/L	NT		0.19	U	NT		NT	

			CF-MW-6				CF-MW-8			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW6V14.0N		20110908CFMW6V13.5N		20110315CPMW-8V14.0N		20110909CFMW8V14N	
Lab Sample No.	PQLs and		460-24182-6		460-30950-4		460-24182-4		460-30955-2	
Sampling Date	GW Quality		3/15/2011		9/8/2011 12:31:00 PM		3/15/2011		9/9/2011 10:55:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.21	J	0.13	U	0.64	J	0.60	J
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	**8.1**	
Arsenic, Dissolved	3	µg/L	NT		2.3	U	NT		NR	
Total Mercury	2	µg/L	0.24		**2.5**		1.9		0.58	
Mercury, Dissolved	2	µg/L	NT		0.19	U	NT		NT	

Notes:

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J - The concentration is an approximate value
NT - Not tested

NR - Sample was not run for this analysis. In Quarter 1, neither arsenic or mercury exceeeded their respective GWQC. In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 2 - Contaminant Flux Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-9				CF-MW-11			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW-9V13.0N		20110907CFMW9V13.0N		20110318CF-MW-11V13.0N		20110908CFMW11V13FD	
Lab Sample No.	PQLs and		460-24182-1		460-30741-5		460-24347-1		460-30950-7	
Sampling Date	GW Quality		3/15/2011		9/7/2011 3:55:00 PM		3/18/2011		9/8/2011 3:48:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	**1.8**		**3.4**		0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	2.3	U
Arsenic, Dissolved	3	µg/L	NT		NT		NT		NT	
Total Mercury	2	µg/L	0.83		0.26		0.22		0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			CF-MW-10				CF-MW-12			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW-10V13.0N		20110907CFMW10V12.5N		20110317CF-MW-12V9.5N		20110907CFMW12V9.5N	
Lab Sample No.	PQLs and		460-24182-2		460-30741-4		460-24309-8		460-30741-3	
Sampling Date	GW Quality		3/15/2011		9/7/2011 12:11:00 PM		3/17/2011		9/7/2011 12:14:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.13	U	0.13	U	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	J	2.3	U
Arsenic, Dissolved	3	µg/L	NT		NT		NT		NT	
Total Mercury	2	µg/L	0.18	U	0.19	U	0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

Notes:

Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

NR - Sample was not run for this analysis. In Quarter 1, neither arsenic or mercury exceeeded their respective GWQC. In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-1				BW-MW-3			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110316BW-MW-1V6.25N		20110909BWMW1V7N		20110314BW-MW-3V11.0N		20110906BWMW3V11.0N	
Lab Sample No.	PQLs and		460-24264-5		460-30955-5		460-24087-2		460-30707-1	
Sampling Date	GW Quality		3/16/2011		9/9/2011 2:51:00 PM		3/14/2011		9/6/2011 1:00:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.24	J	0.24	J	0.13	U	0.32	J
METALS										
Total Arsenic	3	µg/L	**5.1**		2.3	U	2.3	U	**5.1**	
Arsenic, Dissolved	3	µg/L	**5.3**		2.3	U	NT		NR	
Total Mercury	2	µg/L	**35**		**5.2**		0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	**15**		1.6		NT		NT	

			BW-MW-2				BW-MW-4			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110314BW-MW-2V7.0N		20110906BWMW2V7N		110317BW-MW-4V12.0N		20110907 BWMW4V12.0N	
Lab Sample No.	PQLs and		460-24087-5		460-30707-2		460-24309-4		460-30741-1	
Sampling Date	GW Quality		3/14/2011		9/6/2011 1:55:00 PM		3/17/2011		9/7/2011 9:45:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	**1.3**		**1.2**		**7.7**		**7.3**	
METALS										
Total Arsenic	3	µg/L	**9.0**		**18**		**8.2**		**9.8**	
Arsenic, Dissolved	3	µg/L	2.3	U	NR		2.3	U	NR	
Total Mercury	2	µg/L	0.42		0.48		**19**		1.8	
Mercury, Dissolved	2	µg/L	0.18	U	NT		0.18	U	NT	

Notes:
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U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-5				BW-MW-7			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110317BW-MW-5V11.75N		20110907BWMW5V11.75N		20110316BW-MW-7V7.ON		20110906BWMW7V7.0N	
Lab Sample No.	PQLs and		460-24309-5		460-30741-2		460-24264-1		460-30707-5	
Sampling Date	GW Quality		3/17/2011		9/7/2011 9:45:00 AM		3/16/2011		9/6/2011 3:50:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.32		**1.2**		0.71	J	0.85	J
METALS										
Total Arsenic	3	µg/L	2.5		**35**		**4.2**		**6.3**	
Arsenic, Dissolved	3	µg/L	NT		NR		2.3	U	NR	
Total Mercury	2	µg/L	0.18	U	0.19	U	0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		0.18	U	NT	

			BW-MW-6				BW-MW-8			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110317BW-MW-6V9.5N		20110909BWMW6V9.5N		20110316BW-MW-8V7.0N		20110909BWMW8V7N	
Lab Sample No.	PQLs and		460-24309-7		460-30955-3		460-24264-2		460-30955-4	
Sampling Date	GW Quality		3/17/2011		9/9/2011 12:06:00 PM		3/16/2011		9/9/2011 12:41:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.44	J	0.63	J	0.43	J	0.25	J
METALS										
Total Arsenic	3	µg/L	**4.4**		**17**		3.0		**3.4**	
Arsenic, Dissolved	3	µg/L	2.3	U	NR		2.3	U	2.3	U
Total Mercury	2	µg/L	0.23		0.69		**4.1**		**9.8**	
Mercury, Dissolved	2	µg/L	0.18	U	NT		1.5		1.4	

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J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-1				CF-MW-3			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110314CF-MW-1V11.81N		20110906CFMW1VN		20110316CF-MW-3V 14.0N		20110908CFMW3V13.7N	
Lab Sample No.	PQLs and		460-24087-1		460-30707-6		460-24264-8		460-30950-1	
Sampling Date	GW Quality		3/14/2011		9/6/2011 3:55:00 PM		3/16/2011		9/8/2011 11:02:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.13	U	0.13	U	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	**13**		2.3	J	**24**	
Arsenic, Dissolved	3	µg/L	NT		NR		NT		NR	
Total Mercury	2	µg/L	0.18	U	0.19	U	0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			CF-MW-2				CF-MW-4			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110317CF-MW-2V14.5N		20110909CFMW2V14.5N		20110316CF-MW-4V12.8N		20110908CFMW4V12.75N	
Lab Sample No.	PQLs and		460-24309-1		460-30955-1		460-24264-7		460-30950-2	
Sampling Date	GW Quality		3/17/2011		9/9/2011 10:26:00 AM		3/16/2011		9/8/2011 11:31:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.16	J	0.13	U	0.16	J	0.14	J
METALS										
Total Arsenic	3	µg/L	2.3	U	**32**		2.3	U	2.4	J
Arsenic, Dissolved	3	µg/L	NT		NR		NT		NT	
Total Mercury	2	µg/L	0.97		0.7		0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

Notes:
Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-5				CF-MW-7			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW5V13SN		20110908CFMW5V13N		20110315MW-7V14.37N		20110907CFMW7V14.0N	
Lab Sample No.	PQLs and		460-24182-7		460-30950-3		460-24182-5		460-30741-6	
Sampling Date	GW Quality		3/15/2011		9/8/2011 12:44:00 PM		3/15/2011		9/7/2011 4:11:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.27	J	0.19	J	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	2.5	
Arsenic, Dissolved	3	µg/L	NT		2.3	U	NT		NT	
Total Mercury	2	µg/L	0.69		**4.1**		0.18	U	0.21	
Mercury, Dissolved	2	µg/L	NT		0.19	U	NT		NT	

			CF-MW-6				CF-MW-8			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW6V14.0N		20110908CFMW6V13.5N		20110315CPMW-8V14.0N		20110909CFMW8V14N	
Lab Sample No.	PQLs and		460-24182-6		460-30950-4		460-24182-4		460-30955-2	
Sampling Date	GW Quality		3/15/2011		9/8/2011 12:31:00 PM		3/15/2011		9/9/2011 10:55:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.21	J	0.13	U	0.64	J	0.60	J
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	**8.1**	
Arsenic, Dissolved	3	µg/L	NT		2.3	U	NT		NR	
Total Mercury	2	µg/L	0.24		**2.5**		1.9		0.58	
Mercury, Dissolved	2	µg/L	NT		0.19	U	NT		NT	

Notes:
Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			CF-MW-9				CF-MW-11			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW-9V13.0N		20110907CFMW9V13.0N		20110318CF-MW-11V13.0N		20110908CFMW11V13FD	
Lab Sample No.	PQLs and		460-24182-1		460-30741-5		460-24347-1		460-30950-7	
Sampling Date	GW Quality		3/15/2011		9/7/2011 3:55:00 PM		3/18/2011		9/8/2011 3:48:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	**1.8**		**3.4**		0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	U	2.3	U
Arsenic, Dissolved	3	µg/L	NT		NT		NT		NT	
Total Mercury	2	µg/L	0.83		0.26		0.22		0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			CF-MW-10				CF-MW-12			
			Q1		Q3		Q1		Q3	
Sample ID	NJ Higher of		20110315CF-MW-10V13.0N		20110907CFMW10V12.5N		20110317CF-MW-12V9.5N		20110907CFMW12V9.5N	
Lab Sample No.	PQLs and		460-24182-2		460-30741-4		460-24309-8		460-30741-3	
Sampling Date	GW Quality		3/15/2011		9/7/2011 12:11:00 PM		3/17/2011		9/7/2011 12:14:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
VOCs										
Benzene	1	µg/L	0.13	U	0.13	U	0.13	U	0.13	U
METALS										
Total Arsenic	3	µg/L	2.3	U	2.3	U	2.3	J	2.3	U
Arsenic, Dissolved	3	µg/L	NT		NT		NT		NT	
Total Mercury	2	µg/L	0.18	U	0.19	U	0.18	U	0.19	U
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

Notes:
Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 3- CEA Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			MW-10			
			Q1		Q3	
Sample ID	NJ Higher of		20110316MW-10V8N		20110908MW10V8N	
Lab Sample No.	PQLs and		460-24264-6		460-30950-6	
Sampling Date	GW Quality		3/16/2011		9/8/2011 3:51:00 PM	
Matrix	2005 Criteria		Water		Water	
VOCs						
Benzene	1	µg/L	0.13	U	0.13	U
METALS						
Total Arsenic	3	µg/L	2.3	U	2.3	U
Arsenic, Dissolved	3	µg/L	2.3	U	2.3	U
Total Mercury	2	µg/L	**18**		**8**	
Mercury, Dissolved	2	µg/L	0.18	U	0.19	U

			MW-11					
			Q1		Q3		Q4	
Sample ID	NJ Higher of							
Lab Sample No.	PQLs and							
Sampling Date	GW Quality							
Matrix	2005 Criteria							
VOCs								
Benzene	1	µg/L	NT		NT		0.13	U
METALS								
Total Arsenic	3	µg/L	NT		NT		**15**	
Arsenic, Dissolved	3	µg/L	NT		NT		2.9	
Total Mercury	2	µg/L	NT		NT		1.6	
Mercury, Dissolved	2	µg/L	NT		NT		NT	

Notes:
Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, both arsenic and mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury). In Quarter 3, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury), and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis; however the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 4- Full TCL/TAL Groundwater Sampling Results
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Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		BW-MW-1	BW-MW-2	BW-MW-3	BM-MW-4	BM-MW-5	BM-MW-6
Sample ID	NJ Higher of	20110316BW-MW-1V6.25N	20110314BW-MW-2V7.0N	20110314BW-MW-3V11.0N	20110317BW-MW-4V12.0N	20110317BW-MW-5V11.75N	20110317BW-MW-6V9.5N
Lab Sample No.	PQLs and	460-24264-5	460-24087-5	460-24087-2	460-24309-4	460-24309-5	460-24309-7
Sampling Date	GW Quality	3/16/2011	3/14/2011	3/14/2011	3/17/2011	3/17/2011	3/17/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)							
1,1,1-Trichloroethane	30	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.090 U
1,1,2-Trichloroethane	3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethane	50	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethene	2	0.14 U	0.46 J	0.14 U	0.14 U	0.14 U	0.14 U
1,2,3-Trichlorobenzene	NA	0.83 U	0.83 U	0.83 U	0.83 U *	0.83 U *	0.83 U *
1,2,4-Trichlorobenzene	9	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-Dibromo-3-Chloropropane	1	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2-Dibromoethane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.090 U
1,2-Dichlorobenzene	600	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichloroethane	2	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.41 J
1,2-Dichloropropane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.090 U
1,3-Dichlorobenzene	600	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,4-Dichlorobenzene	75	0.15 U	0.15 U	0.15 U	0.15 U	0.56 U	0.15 U
1,4-Dioxane	NA	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR
2-Butanone	300	46	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
2-Hexanone	100	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
4-Methyl-2-pentanone	400	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Acetone	700	5.6 J	2.5 U	2.5 U	2.5 U	2.50 U	2.5 U
Benzene	1	0.24 J	**1.3**	0.13 U	**7.7**	0.32	0.44 J
Bromodichloromethane	1	0.093 U	0.093 U	0.093 U	0.093 U	0.09 U	0.093 U
Bromoform	4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Bromomethane	10	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Carbon disulfide	800	0.15 U	0.15 U	0.15 U	0.31 J	0.15 J	0.15 U
Carbon tetrachloride	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Chlorobenzene	50	0.16 U	0.16 U	0.16 U	0.85 J	1.50 J	0.16 U
Chloroethane	100	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Chloroform	6	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloromethane	30	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.69 J
cis-1,2-Dichloroethene	70	7.9	**180**	1.4 U	0.57 J	0.20 J	23
cis-1,3-Dichloropropene	NA	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Cyclohexane	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dibromochloromethane	10	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Dichlorodifluoromethane	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Ethylbenzene	700	0.25 U	0.25 U	0.25 U	3.8	0.25	0.25 U
Freon TF	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Isopropylbenzene	NA	0.21 U	0.21 U	0.21 U	0.52 J	0.21 J	0.21 U
Methyl acetate	7000	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methylcyclohexane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.09 U	0.090 U
Methylene Chloride	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

Notes:
Grey shading indicates that the concentration was detected above its NJ GW Quality Criteria.
NA - Not applicable
U - The compound was not detected
J - The reported value is an estimated concentration
R - This results was rejected in the data validation stage
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

Table 4- Full TCL/TAL Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		BW-MW-1	BW-MW-2	BW-MW-3	BM-MW-4	BM-MW-5	BM-MW-6
Sample ID	NJ Higher of	20110316BW-MW-1V6.25N	20110314BW-MW-2V7.0N	20110314BW-MW-3V11.0N	20110317BW-MW-4V12.0N	20110317BW-MW-5V11.75N	20110317BW-MW-6V9.5N
Lab Sample No.	PQLs and	460-24264-5	460-24087-5	460-24087-2	460-24309-4	460-24309-5	460-24309-7
Sampling Date	GW Quality	3/16/2011	3/14/2011	3/14/2011	3/17/2011	3/17/2011	3/17/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTBE	70	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Styrene	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Tetrachloroethene	1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	1000	0.33 J	0.090 U	0.090 U	0.10 J	0.09 J	0.090 U
trans-1,2-Dichloroethene	100	0.81 J	1.9	0.71 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Trichloroethene	1	1.8	1.3	0.18 U	0.18 U	0.18 U	1.0
Trichlorofluoromethane	2000	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Vinyl chloride	5	2.0	**260**	2.8 U	0.44 J	0.13 J	**13**
Xylenes, Total	1000	0.43 U	0.43 U	0.43 U	0.80 J	0.43 J	0.43 U
Total Confident Conc.		64.68	444.96	4.91	15.09	2.38	38.54
Total Estimated Conc. (TICs)		0	0	0	13	0	0
VOLATILE COMPOUNDS (GC/MS)							
1,2-Dibromo-3-Chloropropane	0.02	0.018 U	0.018 U	0.018 U	0.018 U	0.02 U	0.018 U *
1,4-Dioxane	NA	0.88 U	6.1	4.0 U	15	1.60	0.88 U
Ethylene Dibromide	0.03	0.016 U	0.016 U	0.016 U	0.016 U	0.02 U	0.016 U
Total Confident Conc.		0	6.1	4	15	1.60	0
Total Estimated Conc. (TICs)		0	0	0	0	0	0
SEMIVOLATILE COMPOUNDS (GC/MS)							
1,2,4,5-Tetrachlorobenzene	NA	2.5 U	2.7 U	2.7	2.5 U	2.4 U	2.4 U
1,2,4-Trichlorobenzene	9	0.54 U	0.58 U	0.58	0.55 U	0.5 U	0.53 U
1,2-Dichlorobenzene	600	3.8 U	4.1 U	4.1	3.9 U	3.8 U	3.8 U
1,3-Dichlorobenzene	600	3.9 U	4.2 U	4.2	4.0 U	3.8 U	3.8 U
1,4-Dichlorobenzene	75	4.7 U	5.1 U	5.1	4.8 U	4.6 U	4.6 U
2,3,4,6-Tetrachlorophenol	NA	2.1 U	2.3 U	2.3	2.2 U	2.1 U	2.1 U
2,4,5-Trichlorophenol	700	2.6 U	2.8 U	2.8	2.6 U	2.5 U	2.5 U
2,4,6-Trichlorophenol	20	3.3 U	3.5 U	3.5	3.3 U	3.2 U	3.2 U
2,4-Dichlorophenol	20	2.8 U	3.1 U	3.1	2.9 U	2.8 U	2.8 U
2,4-Dimethylphenol	100	2.6 U	2.8 U	2.8	2.6 U	2.5 U	2.5 U
2,4-Dinitrophenol	40	5.0 U	5.3 U	5.3	5.1 U	4.9 U	4.9 U
2,4-Dinitrotoluene	10	0.44 U	0.48 U	0.48	0.45 U	0.4 U	0.43 U
2,6-Dinitrotoluene	NA	0.61 U	0.66 U	0.66	0.62 U	0.6 U	0.60 U
2-Chloronaphthalene	600	3.9 U	4.2 U	4.2	3.9 U	3.8 U	3.8 U
2-Chlorophenol	40	2.7 U	2.9 U	2.9	2.8 U	2.6 U	2.6 U
2-Methylnaphthalene	NA	3.2 U	3.4 U	3.4	3.3 U	3.1 U	3.1 U
2-Methylphenol	NA	1.7 U	1.8 U	1.8	1.7 U	1.7 U	1.7 U
2-Nitroaniline	NA	5.9 U	6.3 U	6.3	6.0 U	5.8 U	5.8 U
2-Nitrophenol	NA	3.5 U	3.8 U	3.8	3.6 U	3.4 U	3.4 U
3,3'-Dichlorobenzidine	30	7.2 U	7.7 U	7.7	7.3 U	7.0 U	7.0 U
3-Nitroaniline	NA	4.5 U	4.8 U	4.8	4.6 U	4.4 U	4.4 U
4,6-Dinitro-2-methylphenol	NA	5.4 U	5.8 U	5.8	5.5 U	5.3 U	5.3 U
4-Bromophenyl phenyl ether	NA	4.0 U	4.4 U	4.4	4.1 U	4.0 U	4.0 U
4-Chloro-3-methylphenol	NA	2.1 U	2.2 U	2.2	2.1 U	2.0 U	2.0 U

Notes:
Grey shading indicates that the concentration was detected above its NJ GW Quality Criteria.

NA - Not applicable

U - The compound was not detected

J - The reported value is an estimated concentration

R - This results was rejected in the data validation stage

NT - Not tested

NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

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Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		BW-MW-1	BW-MW-2	BW-MW-3	BM-MW-4	BM-MW-5	BM-MW-6
Sample ID	NJ Higher of	20110316BW-MW-1V6.25N	20110314BW-MW-2V7.0N	20110314BW-MW-3V11.0N	20110317BW-MW-4V12.0N	20110317BW-MW-5V11.75N	20110317BW-MW-6V9.5N
Lab Sample No.	PQLs and	460-24264-5	460-24087-5	460-24087-2	460-24309-4	460-24309-5	460-24309-7
Sampling Date	GW Quality	3/16/2011	3/14/2011	3/14/2011	3/17/2011	3/17/2011	3/17/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
4-Chlorophenyl phenyl ether	NA	4.0 U	4.4 U	4.4	4.1 U	4.0 U	4.0 U
4-Methylphenol	NA	1.6 U	1.8 U	1.8	1.7 U	1.6 U	1.6 U
4-Nitroaniline	NA	4.1 U	4.4 U	4.4	4.2 U	4.0 U	4.0 U
4-Nitrophenol	NA	2.4 U	2.6 U	2.6	2.4 U	2.3 U	2.3 U
Acenaphthene	400	3.9 U	4.2 U	4.2	4.0 U	3.8 U	3.8 U
Acenaphthylene	NA	4.2 U	4.5 U	4.5	4.2 U	4.1 U	4.1 U
Anthracene	2000	3.7 U	3.9 U	3.9	3.7 U	3.6 U	3.6 U
Benzo[g,h,i]perylene	NA	2.8 U	3.0 U	3.0	2.9 U	2.7 U	2.7 U
Benzo[k]fluoranthene	0.5	0.31 U	0.33 U	0.33	0.32 U	0.3 U	0.30 U
bis (2-chloroisopropyl) ether	300	3.3 U	3.6 U	**3.6**	3.4 U	3.2 U	3.2 U
Bis(2-chloroethoxy)methane	NA	3.6 U	3.9 U	3.9	3.7 U	3.5 U	3.5 U
Bis(2-chloroethyl)ether	7	0.42 U	0.46 U	0.46	0.43 U	0.4 U	0.41 U
Bis(2-ethylhexyl) phthalate	3	2.5 U	2.7 U	2.7	2.5 U	2.4 U	2.4 U
Butyl benzyl phthalate	100	2.9 U	3.1 U	**3.1**	2.9 U	2.8 U	2.8 U
Carbazole	NA	3.2 U	3.4 U	3.4	3.2 U	3.1 U	3.1 U
Chrysene	5	3.9 U	4.2 U	4.2	4.0 U	3.8 U	3.8 U
Dibenz(a,h)anthracene	0.3	0.16 U	0.18 U	0.18	0.17 U	0.2 U	0.16 U
Dibenzofuran	NA	3.7 U	4.0 U	4.0	3.8 U	3.6 U	3.6 U
Diethyl phthalate	6000	3.9 U	4.2 U	4.2	4.0 U	3.9 U	3.9 U
Dimethyl phthalate	NA	3.4 U	3.6 U	3.6	3.4 U	3.3 U	3.3 U
Di-n-butyl phthalate	700	2.9 U	3.1 U	3.1	2.9 U	2.8 U	2.8 U
Di-n-octyl phthalate	100	2.0 U	2.1 U	2.1	2.0 U	1.9 U	1.9 U
Fluoranthene	300	2.7 U	2.9 U	2.9	2.8 U	2.7 U	2.7 U
Fluorene	300	3.4 U	3.6 U	3.6	3.4 U	3.3 U	3.3 U
Hexachlorobutadiene	1	0.97 U	1.0 U	1.0	0.99 U	1.0 U	0.95 U
Hexachlorocyclopentadiene	40	4.7 U	5.1 U	**5.1**	4.8 U	4.6 U	4.6 U
Hexachloroethane	7	0.52 U	0.56 U	0.56	0.53 U	0.5 U	0.51 U
Indeno[1,2,3-cd]pyrene	0.2	0.12 U	0.13 U	0.13	0.13 U	0.1 U	0.12 U
Isophorone	40	3.7 U	4.0 U	4.0	3.8 U	3.6 U	3.6 U
Naphthalene	300	3.8 U	4.1 U	4.1	3.9 U	3.7 U	3.7 U
Nitrobenzene	6	0.42 U	0.46 U	0.46	0.43 U	0.4 U	0.41 U
N-Nitrosodi-n-propylamine	10	0.33 U	0.36 U	0.36	0.34 U	0.3 U	0.32 U
N-Nitrosodiphenylamine	10	4.0 U	4.3 U	4.3	4.1 U	3.9 U	3.9 U
Phenanthrene	NA	3.7 U	4.0 U	4.0	3.7 U	3.6 U	3.6 U
Phenol	2000	0.92 U	0.99 U	0.99	0.94 U	0.9 U	0.90 U
Pyrene	200	4.4 U	4.7 U	4.7	4.5 U	4.3 U	4.3 U
Total Confident Conc.		0	0	0	0	0	0
Total Estimated Conc. (TICs)		0	0	0	0	4.2	0

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Wood-Ridge, NJ

		BW-MW-1	BW-MW-2	BW-MW-3	BM-MW-4	BM-MW-5	BM-MW-6
Sample ID	NJ Higher of	20110316BW-MW-1V6.25N	20110314BW-MW-2V7.0N	20110314BW-MW-3V11.0N	20110317BW-MW-4V12.0N	20110317BW-MW-5V11.75N	20110317BW-MW-6V9.5N
Lab Sample No.	PQLs and	460-24264-5	460-24087-5	460-24087-2	460-24309-4	460-24309-5	460-24309-7
Sampling Date	GW Quality	3/16/2011	3/14/2011	3/14/2011	3/17/2011	3/17/2011	3/17/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILE COMPOUNDS (GC/MS)		0.045 J	0.022 U	0.036			
Benzo[a]anthracene	0.1	0.031 U	0.033 U	0.033	0.027 J	0.02 J	0.020 U
Benzo[a]pyrene	0.1	0.041 U	0.044 U	0.044	0.032 U	0.03 U	0.030 U
Benzo[b]fluoranthene	0.2	0.010 U	0.011 U	0.011	0.042 U	0.04 U	0.040 U
Hexachlorobenzene	0.02	5.7	0.33	0.16	0.011 U	0.01 U	0.010 U
Pentachlorophenol	0.3	5.745	0.33	0.036	0.15 U	0.14	0.14 U
Total Confident Conc.		0	0	0	0.027	0	0
Total Estimated Conc. (TICs)					0	0	0
PESTICIDES		0.011 U	0.012 U	0.012			
4,4'-DDD	0.1	0.0092 U	0.0095 U	0.010	0.012 U	0.012 U	0.012 U
4,4'-DDE	0.1	0.010 U	0.011 U	0.011	0.0095 U	0.0095 U	0.0095 U
4,4'-DDT	0.1	0.010 U	0.011 U	0.011	0.011 U	0.011 U	0.011 U
Aldrin	0.04	0.010 U	0.011 U	0.011	0.011 U	0.011 U	0.011 U
alpha-BHC	0.02	0.011 U	0.012 U	0.012	0.011 U	0.011 U	0.011 U
beta-BHC	0.04	0.34 U	0.35 U	0.37	0.012 U	0.012 U	0.012 U
Chlordane	0.5	0.0092 U	0.0095 U	0.010	0.35 U	0.35 U	0.35 U
delta-BHC	NA	0.0051 U	0.0053 U	0.0056	0.0095 U	0.0095 U	0.0095 U
Dieldrin	0.03	0.0092 U	0.0095 U	0.010	0.0053 U	0.0053 U	0.0053 U
Endosulfan I	40	0.010 U	0.011 U	0.011	0.0095 U	0.0095 U	0.0095 U
Endosulfan II	40	0.016 U	0.017 U	0.018	0.011 U	0.011 U	0.011 U
Endosulfan sulfate	40	0.010 U	0.011 U	0.011	0.017 U	0.017 U	0.017 U
Endrin	2	0.0092 U	0.0095 U	0.010	0.011 U	0.011 U	0.011 U
Endrin aldehyde	NA	0.011 U	0.012 U	0.012	0.0095 U	0.0095 U	0.0095 U
Endrin ketone	NA	0.012 U	0.013 U	0.013	0.012 U	0.012 U	0.012 U
gamma-BHC (Lindane)	0.03	0.010 U	0.011 U	0.011	0.013 U	0.013 U	0.013 U
Heptachlor	0.05	0.010 U	0.011 U	0.011	0.011 U	0.011 U	0.011 U
Heptachlor epoxide	0.2	0.013 U	0.014 U	0.014	0.011 U	0.011 U	0.011 U
Methoxychlor	40	0.20 U	0.21 U	0.22	0.014 U	0.014 U	0.014 U
Toxaphene	2				0.21 U	0.21 U	0.21 U
PCBs							
Aroclor 1016	0.5	0.14 U	0.14 U	0.14	0.14 U	0.14 U	0.14 U
Aroclor 1221	0.5	0.30 U	0.29 U	0.31	0.29 U	0.30 U	0.29 U
Aroclor 1232	0.5	0.13 U	0.13 U	0.13	0.13 U	0.13 U	0.13 U
Aroclor 1242	0.5	0.13 U	0.13 U	0.13	0.13 U	0.13 U	0.13 U
Aroclor 1248	0.5	0.26 U	0.25 U	0.27	0.25 U	0.26 U	0.25 U
Aroclor 1254	0.5	0.18 U	0.18 U	0.19	0.18 U	0.18 U	0.18 U
Aroclor 1260	0.5	0.16 U	0.16 U	0.17	0.16 U	0.16 U	0.16 U
Aroclor 1262	NA	0.13 U	0.13 U	0.13	0.13 U	0.13 U	0.13 U
Aroclor 1268	NA	0.13 U	0.13 U	0.13	0.13 U	0.13 U	0.13 U
METALS							
Aluminum	200	**2000**	**280**	**400**	**1100**	180	**14000**
Antimony	6	1.8 U	1.8 U	1.8	1.8 U	1.80 U	1.8 U
Arsenic	3	**5.1**	**9.0**	2.3 U	**8.2**	2.45	**4.4**
Barium	6000	35	210	110	450	49	33
Beryllium	1	0.72 U	0.72 U	0.72	0.72 U	0.72 U	**12**
Cadmium	4	2.0 U	2.0 U	2.0	2.0 U	2 U	2.0 U
Calcium	NA	25000	180000	130000	180000	355000	170000

Notes:
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NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

Table 4- Full TCL/TAL Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		BW-MW-1	BW-MW-2	BW-MW-3	BM-MW-4	BM-MW-5	BM-MW-6
Sample ID	NJ Higher of	20110316BW-MW-1V6.25N	20110314BW-MW-2V7.0N	20110314BW-MW-3V11.0N	20110317BW-MW-4V12.0N	20110317BW-MW-5V11.75N	20110317BW-MW-6V9.5N
Lab Sample No.	PQLs and	460-24264-5	460-24087-5	460-24087-2	460-24309-4	460-24309-5	460-24309-7
Sampling Date	GW Quality	3/16/2011	3/14/2011	3/14/2011	3/17/2011	3/17/2011	3/17/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chromium	70	7.2	3.7 U	3.7	4.0 J	7.85	6.6
Cobalt	NA	4.1 U	4.3 J	33	4.1 U	110	270
Copper	1300	13	4.1 U	8.2	6.4	6	19
Iron	300	**2300**	**3000**	**1000**	**33000**	**52500**	**33000**
Lead	5	1.6	1.2 J	1.2	**11**	4.1	4.9
Magnesium	NA	1900	39000	29000	54000	78500	49000
Manganese	50	**80**	**5500**	**13000**	**6900**	**13000**	**19000**
Mercury	2	**35**	0.42	0.18	**19**	0.18 U	0.23
Nickel	100	4.3 U	20	27	4.3 J	73.5	320
Potassium	NA	8800	14000	43000	4400	16000	12000
Selenium	40	2.5	1.9 U	1.9	1.9 U	1.9 U	12
Silver	40	4.0 U	4.0 U	4.0	4.0 U	4 U	4.0 U
Sodium	50000	100000	**130000**	**51000**	**130000**	33500	**95000**
Thallium	2	0.78 U	0.78 U	0.78	0.78 U	0.78 U	0.78 U
Vanadium	60	34	4.3 U	4.3	6.0	4.3 U	24
Zinc	2000	16 U	16 U	310	56	100	890
Aluminum ,Dissolved	NA	300	48 U	NT	48 U	NT	250
Antimony ,Dissolved	NA	1.8 U	1.8 U	NT	1.8 U	NT	1.8 U
Arsenic ,Dissolved	NA	**5.3**	2.3 U	NT	2.3 U	NT	2.3 U
Barium ,Dissolved	NA	30	190	NT	270	NT	32
Beryllium ,Dissolved	NA	0.72 U	0.72 U	NT	0.72 U	NT	2.2
Cadmium ,Dissolved	NA	2.0 U	2.0 U	NT	2.0 U	NT	2.0 U
Calcium ,Dissolved	NA	35000	170000	NT	180000	NT	170000
Chromium ,Dissolved	NA	3.7 U	3.7 U	NT	3.7 U	NT	3.7 U
Cobalt ,Dissolved	NA	4.1 U	4.1 U	NT	4.1 U	NT	270
Copper ,Dissolved	NA	7.9	4.1 U	NT	4.1 U	NT	8.4
Iron ,Dissolved	NA	130 U	180	NT	130 U	NT	20000
Lead ,Dissolved	NA	1.2 U	1.2 U	NT	1.2 U	NT	1.2 U
Magnesium ,Dissolved	NA	2400	41000	NT	56000	NT	50000
Manganese ,Dissolved	NA	45	5100	NT	6800	NT	18000
Mercury ,Dissolved	NA	15	0.18 U	NT	0.18 U	NT	0.18 U
Nickel ,Dissolved	NA	4.2 U	18	NT	4.3 U	NT	310
Potassium ,Dissolved	NA	9600	13000	NT	4400	NT	12000
Selenium ,Dissolved	NA	1.9 U	1.9 U	NT	1.9 U	NT	2.4 J
Silver ,Dissolved	NA	4.0 U	4.0 U	NT	4.0 U	NT	4.0 U
Sodium ,Dissolved	NA	160000	130000	NT	140000	NT	96000
Thallium ,Dissolved	NA	0.78 U	0.78 U	NT	0.78 U	NT	0.78 U
Vanadium ,Dissolved	NA	24	4.3 U	NT	4.3 U	NT	4.3 U
Zinc ,Dissolved	NA	16 U	59	NT	37	NT	970
WET CHEMISTRY							
Cyanide, Total (mg/L)	100	0.0060 U	0.0060 U	0.0060	0.0060 U	0.0060 U	0.0060 U

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mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the compound that was over the GWQC.

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Wood-Ridge, NJ

		BW-MW-7	BW-MW-8	CF-MW-1	CF-MW-2	CF-MW-3	CF-MW-4
Sample ID	NJ Higher of	20110316BW-MW-7V7.ON	20110316BW-MW-8V7.0N	20110314CF-MW-1V11.81N	20110317CF-MW-2V14.5N	20110316CF-MW-3V 14.0N	20110316CF-MW-4V12.8N
Lab Sample No.	PQLs and	460-24264-1	460-24264-2	460-24087-1	460-24309-1	460-24264-8	460-24264-7
Sampling Date	GW Quality	3/16/2011	3/16/2011	3/14/2011	3/17/2011	3/16/2011	3/16/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)							
1,1,1-Trichloroethane	30	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,1,2-Trichloroethane	3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethane	50	2.2	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethene	2	0.49 J	0.21 J	0.14 U	0.14 U	0.14 U	0.14 U
1,2,3-Trichlorobenzene	NA	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,2,4-Trichlorobenzene	9	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-Dibromo-3-Chloropropane	1	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2-Dibromoethane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,2-Dichlorobenzene	600	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.44 J
1,2-Dichloroethane	2	0.24 U	0.40 J	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,3-Dichlorobenzene	600	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.5
1,4-Dichlorobenzene	75	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	6.3
1,4-Dioxane	NA	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR
2-Butanone	300	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
2-Hexanone	100	0.55 U	0.55 U	0.82 U	0.55 U	0.55 U	0.55 U
4-Methyl-2-pentanone	400	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Acetone	700	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	4.4 J
Benzene	1	0.71 J	0.43 J	0.13 U	0.16 J	0.13 U	0.16 J
Bromodichloromethane	1	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
Bromoform	4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Bromomethane	10	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Carbon disulfide	800	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Carbon tetrachloride	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Chlorobenzene	50	0.16 U	7.8	0.16 U	0.16 U	0.16 U	25
Chloroethane	100	5.6	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Chloroform	6	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloromethane	30	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,2-Dichloroethene	70	**290**	**74**	0.20 U	0.20 U	0.20 U	0.20 U
cis-1,3-Dichloropropene	NA	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Cyclohexane	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dibromochloromethane	10	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Dichlorodifluoromethane	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Ethylbenzene	700	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Freon TF	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Isopropylbenzene	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	15
Methyl acetate	7000	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methylcyclohexane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.65 J
Methylene Chloride	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

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		BW-MW-7	BW-MW-8	CF-MW-1	CF-MW-2	CF-MW-3	CF-MW-4
Sample ID	NJ Higher of	20110316BW-MW-7V7.ON	20110316BW-MW-8V7.0N	20110314CF-MW-1V11.81N	20110317CF-MW-2V14.5N	20110316CF-MW-3V 14.0N	20110316CF-MW-4V12.8N
Lab Sample No.	PQLs and	460-24264-1	460-24264-2	460-24087-1	460-24309-1	460-24264-8	460-24264-7
Sampling Date	GW Quality	3/16/2011	3/16/2011	3/14/2011	3/17/2011	3/16/2011	3/16/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTBE	70	0.30 J	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Styrene	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Tetrachloroethene	1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	1000	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U	0.23 J
trans-1,2-Dichloroethene	100	7.2	0.54 J	0.14 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Trichloroethene	1	0.75 J	0.40 J	0.18 U	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	2000	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Vinyl chloride	5	**29**	**34**	0.13 U	0.13 U	0.13 U	0.13 U
Xylenes, Total	1000	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
Total Confident Conc.		336.25	117.78	0	0.16	0	53.68
Total Estimated Conc. (TICs)		0	0	0	0	0	39.9
VOLATILE COMPOUNDS (GC/MS)							
1,2-Dibromo-3-Chloropropane	0.02	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
1,4-Dioxane	NA	3.8	0.88 U	0.88 U	17	5.2	11
Ethylene Dibromide	0.03	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Total Confident Conc.		3.8	0	0	17	5.2	11
Total Estimated Conc. (TICs)		0	0	0	0	0	0
SEMIVOLATILE COMPOUNDS (GC/MS)							
1,2,4,5-Tetrachlorobenzene	NA	2.5 U	2.4 U	2.7 U	2.7 U	2.4 U	2.4 U
1,2,4-Trichlorobenzene	9	0.54 U	0.53 U	0.58 U	0.58 U	0.53 U	0.53 U
1,2-Dichlorobenzene	600	3.8 U	3.8 U	4.1 U	4.1 U	3.8 U	3.8 U
1,3-Dichlorobenzene	600	3.9 U	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
1,4-Dichlorobenzene	75	4.7 U	4.7 U	5.1 U	5.1 U	4.7 U	4.6 U
2,3,4,6-Tetrachlorophenol	NA	2.1 U	2.1 U	2.3 U	2.3 U	2.1 U	2.1 U
2,4,5-Trichlorophenol	700	2.6 U	2.6 U	2.8 U	2.8 U	2.6 U	2.5 U
2,4,6-Trichlorophenol	20	3.3 U	3.2 U	3.5 U	3.5 U	3.2 U	3.2 U
2,4-Dichlorophenol	20	2.8 U	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
2,4-Dimethylphenol	100	2.6 U	2.6 U	2.8 U	2.8 U	2.6 U	2.5 U
2,4-Dinitrophenol	40	5.0 U	4.9 U	5.3 U	5.3 U	4.9 U	4.9 U
2,4-Dinitrotoluene	10	0.44 U	0.44 U	0.48 U	0.48 U	0.44 U	0.43 U
2,6-Dinitrotoluene	NA	0.61 U	0.60 U	0.66 U	0.66 U	0.60 U	0.60 U
2-Chloronaphthalene	600	3.9 U	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
2-Chlorophenol	40	2.7 U	2.7 U	2.9 U	2.9 U	2.7 U	2.6 U
2-Methylnaphthalene	NA	3.2 U	3.2 U	3.4 U	3.4 U	3.2 U	3.1 U
2-Methylphenol	NA	1.7 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
2-Nitroaniline	NA	5.9 U	5.8 U	6.3 U	6.3 U	5.8 U	5.8 U
2-Nitrophenol	NA	3.5 U	3.5 U	3.8 U	3.8 U	3.5 U	3.4 U
3,3'-Dichlorobenzidine	30	7.2 U	7.1 U	7.7 U	7.7 U	7.1 U	7.0 U
3-Nitroaniline	NA	4.5 U	4.4 U	4.8 U	4.8 U	4.4 U	4.4 U
4,6-Dinitro-2-methylphenol	NA	5.4 U	5.3 U	5.8 U	5.8 U	5.3 U	5.3 U
4-Bromophenyl phenyl ether	NA	4.0 U	4.0 U	4.4 U	4.4 U	4.0 U	4.0 U
4-Chloro-3-methylphenol	NA	2.1 U	2.0 U	2.2 U	2.2 U	2.0 U	2.0 U

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Wood-Ridge, NJ

		BW-MW-7	BW-MW-8	CF-MW-1	CF-MW-2	CF-MW-3	CF-MW-4
Sample ID	NJ Higher of	20110316BW-MW-7V7.ON	20110316BW-MW-8V7.0N	20110314CF-MW-1V11.81N	20110317CF-MW-2V14.5N	20110316CF-MW-3V 14.0N	20110316CF-MW-4V12.8N
Lab Sample No.	PQLs and	460-24264-1	460-24264-2	460-24087-1	460-24309-1	460-24264-8	460-24264-7
Sampling Date	GW Quality	3/16/2011	3/16/2011	3/14/2011	3/17/2011	3/16/2011	3/16/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
4-Chlorophenyl phenyl ether	NA	4.0 U	4.0 U	4.4 U	4.4 U	4.0 U	4.0 U
4-Methylphenol	NA	1.6 U	1.6 U	1.8 U	1.8 U	1.6 U	1.6 U
4-Nitroaniline	NA	4.1 U	4.1 U	4.4 U	4.4 U	4.1 U	4.0 U
4-Nitrophenol	NA	2.4 U	2.4 U	2.6 U	2.6 U	2.4 U	2.3 U
Acenaphthene	400	3.9 U	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
Acenaphthylene	NA	4.2 U	4.1 U	4.5 U	4.5 U	4.1 U	4.1 U
Anthracene	2000	3.7 U	3.6 U	3.9 U	3.9 U	3.6 U	3.6 U
Benzo[g,h,i]perylene	NA	2.8 U	2.8 U	3.0 U	3.0 U	2.8 U	2.7 U
Benzo[k]fluoranthene	0.5	0.31 U	0.31 U	0.33 U	0.33 U	0.31 U	0.30 U
bis (2-chloroisopropyl) ether	300	3.3 U	3.3 U	3.6 U	3.6 U	3.3 U	3.2 U
Bis(2-chloroethoxy)methane	NA	3.6 U	3.5 U	3.9 U	3.9 U	3.5 U	3.5 U
Bis(2-chloroethyl)ether	7	0.42 U	0.42 U	0.46 U	0.46 U	0.42 U	0.41 U
Bis(2-ethylhexyl) phthalate	3	2.5 U	2.4 U	2.7 U	2.7 U	2.4 U	2.4 U
Butyl benzyl phthalate	100	2.9 U	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
Carbazole	NA	3.2 U	3.1 U	3.4 U	3.4 U	3.1 U	3.1 U
Chrysene	5	3.9 U	3.8 U	4.2 U	4.2 U	3.8 U	3.8 U
Dibenz(a,h)anthracene	0.3	0.16 U	0.16 U	0.18 U	0.18 U	0.16 U	0.16 U
Dibenzofuran	NA	3.7 U	3.7 U	4.0 U	4.0 U	3.7 U	3.6 U
Diethyl phthalate	6000	3.9 U	3.9 U	4.2 U	4.2 U	3.9 U	3.9 U
Dimethyl phthalate	NA	3.4 U	3.3 U	3.6 U	3.6 U	3.3 U	3.3 U
Di-n-butyl phthalate	700	2.9 U	2.8 U	3.1 U	3.1 U	2.8 U	2.8 U
Di-n-octyl phthalate	100	2.0 U	1.9 U	2.1 U	2.1 U	1.9 U	1.9 U
Fluoranthene	300	2.7 U	2.7 U	2.9 U	2.9 U	2.7 U	2.7 U
Fluorene	300	3.4 U	3.3 U	3.6 U	3.6 U	3.3 U	3.3 U
Hexachlorobutadiene	1	0.97 U	0.96 U	1.0 U	1.0 U	0.96 U	0.95 U
Hexachlorocyclopentadiene	40	4.7 U	4.7 U	5.1 U	5.1 U	4.7 U	4.6 U
Hexachloroethane	7	0.52 U	0.51 U	0.56 U	0.56 U	0.51 U	0.51 U
Indeno[1,2,3-cd]pyrene	0.2	0.12 U	0.12 U	0.13 U	0.13 U	0.12 U	0.12 U
Isophorone	40	3.7 U	3.7 U	4.0 U	4.0 U	3.7 U	3.6 U
Naphthalene	300	3.8 U	3.7 U	4.1 U	4.1 U	3.7 U	3.7 U
Nitrobenzene	6	0.42 U	0.42 U	0.46 U	0.46 U	0.42 U	0.41 U
N-Nitrosodi-n-propylamine	10	0.33 U	0.33 U	0.36 U	0.36 U	0.33 U	0.32 U
N-Nitrosodiphenylamine	10	4.0 U	3.9 U	4.3 U	4.3 U	3.9 U	3.9 U
Phenanthrene	NA	3.7 U	3.6 U	4.0 U	4.0 U	3.6 U	3.6 U
Phenol	2000	0.92 U	0.91 U	0.99 U	0.99 U	0.91 U	0.90 U
Pyrene	200	4.4 U	4.4 U	4.7 U	4.7 U	4.4 U	4.3 U
Total Confident Conc.		0	0	0	0	0	0
Total Estimated Conc. (TICs)		0	0	115	0	0	69

Notes:
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U - The compound was not detected
J - The reported value is an estimated concentration
R - This results was rejected in the data validation stage
NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

Table 4- Full TCL/TAL Groundwater Sampling Results
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Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		BW-MW-7	BW-MW-8	CF-MW-1	CF-MW-2	CF-MW-3	CF-MW-4
Sample ID	NJ Higher of	20110316BW-MW-7V7.ON	20110316BW-MW-8V7.0N	20110314CF-MW-1V11.81N	20110317CF-MW-2V14.5N	20110316CF-MW-3V 14.0N	20110316CF-MW-4V12.8N
Lab Sample No.	PQLs and	460-24264-1	460-24264-2	460-24087-1	460-24309-1	460-24264-8	460-24264-7
Sampling Date	GW Quality	3/16/2011	3/16/2011	3/14/2011	3/17/2011	3/16/2011	3/16/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILE COMPOUNDS (GC/MS)							
Benzo[a]anthracene	0.1	0.021 U	0.020 U	0.022 U	0.022 U	0.020 U	0.020 U
Benzo[a]pyrene	0.1	0.031 U	0.031 U	0.033 U	0.033 U	0.031 U	0.030 U
Benzo[b]fluoranthene	0.2	0.041 U	0.041 U	0.044 U	0.044 U	0.041 U	0.040 U
Hexachlorobenzene	0.02	0.010 U	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U
Pentachlorophenol	0.3	0.14 U	0.14 U	0.16 U	0.16 U	0.14 U	0.14 U
Total Confident Conc.		0	0	0	0	0	0
Total Estimated Conc. (TICs)		0	0	0	0	0	0
PESTICIDES							
4,4'-DDD	0.1	0.011 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U
4,4'-DDE	0.1	0.0092 U	0.0098 U	0.010 U	0.0092 U	0.0093 U	0.0093 U
4,4'-DDT	0.1	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
Aldrin	0.04	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
alpha-BHC	0.02	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
beta-BHC	0.04	0.011 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U
Chlordane	0.5	0.34 U	0.36 U	0.37 U	0.34 U	0.34 U	0.34 U
delta-BHC	NA	0.0092 U	0.0098 U	0.010 U	0.0092 U	0.0093 U	0.0093 U
Dieldrin	0.03	0.0051 U	0.0054 U	0.0056 U	0.0051 U	0.0052 U	0.0052 U
Endosulfan I	40	0.0092 U	0.0098 U	0.010 U	0.0092 U	0.0093 U	0.0093 U
Endosulfan II	40	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
Endosulfan sulfate	40	0.016 U	0.017 U	0.018 U	0.016 U	0.016 U	0.016 U
Endrin	2	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
Endrin aldehyde	NA	0.0092 U	0.0098 U	0.010 U	0.0092 U	0.0093 U	0.0093 U
Endrin ketone	NA	0.011 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U
gamma-BHC (Lindane)	0.03	0.012 U	0.013 U	0.013 U	0.012 U	0.012 U	0.012 U
Heptachlor	0.05	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
Heptachlor epoxide	0.2	0.010 U	0.011 U	0.011 U	0.010 U	0.010 U	0.010 U
Methoxychlor	40	0.013 U	0.014 U	0.014 U	0.013 U	0.013 U	0.013 U
Toxaphene	2	0.20 U	0.22 U	0.22 U	0.20 U	0.21 U	0.21 U
PCBs							
Aroclor 1016	0.5	0.13 U	0.13 U	0.14 U	0.13 U	0.14 U	0.14 U
Aroclor 1221	0.5	0.29 U	0.29 U	0.31 U	0.29 U	0.29 U	0.30 U
Aroclor 1232	0.5	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U
Aroclor 1242	0.5	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U
Aroclor 1248	0.5	0.24 U	0.24 U	0.27 U	0.24 U	0.25 U	0.26 U
Aroclor 1254	0.5	0.17 U	0.17 U	0.19 U	0.17 U	0.18 U	0.18 U
Aroclor 1260	0.5	0.15 U	0.15 U	0.17 U	0.15 U	0.16 U	0.16 U
Aroclor 1262	NA	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U
Aroclor 1268	NA	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U
METALS							
Aluminum	200	75	200	**4800**	**270**	**6700**	**620**
Antimony	6	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Arsenic	3	**4.2**	3.0	2.3 U	2.3 U	2.3 J	2.3 U
Barium	6000	180	140	45	88	13	550
Beryllium	1	0.72 U	0.72 U	**8.7**	0.72 U	**8.8**	0.72 U
Cadmium	4	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Calcium	NA	55000	51000	110000	270000	260000	240000

Notes:
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NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

Table 4- Full TCL/TAL Groundwater Sampling Results
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Wood-Ridge, NJ

		BW-MW-7	BW-MW-8	CF-MW-1	CF-MW-2	CF-MW-3	CF-MW-4
Sample ID	NJ Higher of	20110316BW-MW-7V7.0N	20110316BW-MW-8V7.0N	20110314CF-MW-1V11.81N	20110317CF-MW-2V14.5N	20110316CF-MW-3V 14.0N	20110316CF-MW-4V12.8N
Lab Sample No.	PQLs and	460-24264-1	460-24264-2	460-24087-1	460-24309-1	460-24264-8	460-24264-7
Sampling Date	GW Quality	3/16/2011	3/16/2011	3/14/2011	3/17/2011	3/16/2011	3/16/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chromium	70	3.7 U	3.7 U	3.7 U	3.7 U	10	11
Cobalt	NA	4.1 U	4.1 U	210	18	480	4.1 U
Copper	1300	4.1 U	4.1 U	13	12	14	12
Iron	300	**18000**	**8200**	**7800**	**29000**	**52000**	**31000**
Lead	5	1.2 U	1.2 U	**11**	**18**	**11**	**37**
Magnesium	NA	20000	13000	25000	41000	61000	26000
Manganese	50	**2500**	**1400**	**5800**	**3700**	**22000**	**2800**
Mercury	2	0.18 U	**4.1**	0.18 U	0.97	0.18 U	0.18 U
Nickel	100	4.3 U	4.3 U	**190**	37	**420**	25
Potassium	NA	630	1200	8800	21000	12000	11000
Selenium	40	1.9 U	1.9 U	2.4 J	1.9 U	8.0	1.9 U
Silver	40	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Sodium	50000	**110000**	37000	11000	**57000**	50000	**88000**
Thallium	2	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Vanadium	60	4.3 U	4.3 U	4.3 J	4.3 U	4.3 U	5.4
Zinc	2000	16 U	16 J	850	140	1100	120
Aluminum ,Dissolved	NA	48 U	48 U	NT	NT	NT	NT
Antimony ,Dissolved	NA	1.8 U	1.8 U	NT	NT	NT	NT
Arsenic ,Dissolved	NA	2.3 U	2.3 U	NT	NT	NT	NT
Barium ,Dissolved	NA	140	120	NT	NT	NT	NT
Beryllium ,Dissolved	NA	0.72 U	0.72 U	NT	NT	NT	NT
Cadmium ,Dissolved	NA	2.0 U	2.0 U	NT	NT	NT	NT
Calcium ,Dissolved	NA	55000	50000	NT	NT	NT	NT
Chromium ,Dissolved	NA	3.7 U	3.7 U	NT	NT	NT	NT
Cobalt ,Dissolved	NA	4.1 U	4.1 U	NT	NT	NT	NT
Copper ,Dissolved	NA	4.1 U	4.1 U	NT	NT	NT	NT
Iron ,Dissolved	NA	3600	2700	NT	NT	NT	NT
Lead ,Dissolved	NA	1.2 U	1.2 U	NT	NT	NT	NT
Magnesium ,Dissolved	NA	19000	13000	NT	NT	NT	NT
Manganese ,Dissolved	NA	2400	1300	NT	NT	NT	NT
Mercury ,Dissolved	NA	0.18 U	1.5	NT	NT	NT	NT
Nickel ,Dissolved	NA	4.3 U	4.3 U	NT	NT	NT	NT
Potassium ,Dissolved	NA	530	1100	NT	NT	NT	NT
Selenium ,Dissolved	NA	1.9 U	1.9 U	NT	NT	NT	NT
Silver ,Dissolved	NA	4.0 U	4.0 U	NT	NT	NT	NT
Sodium ,Dissolved	NA	110000	37000	NT	NT	NT	NT
Thallium ,Dissolved	NA	0.78 U	0.78 U	NT	NT	NT	NT
Vanadium ,Dissolved	NA	4.3 U	4.3 U	NT	NT	NT	NT
Zinc ,Dissolved	NA	16 U	16 U	NT	NT	NT	NT
WET CHEMISTRY							
Cyanide, Total (mg/L)	100	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.010

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mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 4- Full TCL/TAL Groundwater Sampling Results
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Wood-Ridge, NJ

		CF-MW-5	CF-MW-6	CF-MW-7	CF-MW-8	CF-MW-9
Sample ID	NJ Higher of	20110315CF-MW5V13SN	20110315CF-MW6V14.0N	20110315MW-7V14.37N	20110315CPMW-8V14.0N	20110315CF-MW-9V13.0N
Lab Sample No.	PQLs and	460-24182-7	460-24182-6	460-24182-5	460-24182-4	460-24182-1
Sampling Date	GW Quality	3/15/2011	3/15/2011	3/15/2011	3/15/2011	3/15/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)						
1,1,1-Trichloroethane	30	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,1,2-Trichloroethane	3	0.10 U	0.1 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethane	50	0.10 U	0.1 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethene	2	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,3-Trichlorobenzene	NA	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,2,4-Trichlorobenzene	9	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-Dibromo-3-Chloropropane	1	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2-Dibromoethane	NA	0.090 U	0.09 U	0.090 U	0.090 U	0.090 U
1,2-Dichlorobenzene	600	0.36 J	0.16 U	0.16 U	0.26 J	0.16 U
1,2-Dichloroethane	2	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	0.090 U	0.09 U	0.090 U	0.090 U	0.090 U
1,3-Dichlorobenzene	600	1.0	0.22 U	0.22 U	1.0	0.28 J
1,4-Dichlorobenzene	75	3.7	0.32 J	0.58 J	2.1	0.47 J
1,4-Dioxane	NA	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR
2-Butanone	300	0.82 U	0.82 U	0.82 U	0.82 U	0.82 U
2-Hexanone	100	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
4-Methyl-2-pentanone	400	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Acetone	700	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzene	1	0.27 J	0.21 J	0.13 U	0.64 J	**1.8**
Bromodichloromethane	1	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
Bromoform	4	0.10 U	0.1 U	0.10 U	0.10 U	0.10 U
Bromomethane	10	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
Carbon disulfide	800	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Carbon tetrachloride	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Chlorobenzene	50	8.7	1.4	0.62 J	4.0	2.1
Chloroethane	100	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Chloroform	6	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloromethane	30	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,2-Dichloroethene	70	0.23 J	0.2 U	0.20 U	0.20 U	2.7
cis-1,3-Dichloropropene	NA	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Cyclohexane	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dibromochloromethane	10	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Dichlorodifluoromethane	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Ethylbenzene	700	1.1	0.25 U	0.25 U	0.25 U	0.49 J
Freon TF	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Isopropylbenzene	NA	2.3	0.21 U	0.21 U	0.77 J	0.32 J
Methyl acetate	7000	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methylcyclohexane	NA	0.47 J	0.09 U	0.090 U	0.090 U	0.090 U
Methylene Chloride	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

Notes:
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NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

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		CF-MW-5	CF-MW-6	CF-MW-7	CF-MW-8	CF-MW-9
Sample ID	NJ Higher of	20110315CF-MW5V13SN	20110315CF-MW6V14.0N	20110315MW-7V14.37N	20110315CPMW-8V14.0N	20110315CF-MW-9V13.0N
Lab Sample No.	PQLs and	460-24182-7	460-24182-6	460-24182-5	460-24182-4	460-24182-1
Sampling Date	GW Quality	3/15/2011	3/15/2011	3/15/2011	3/15/2011	3/15/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTBE	70	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Styrene	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Tetrachloroethene	1	0.20 U	0.2 U	0.20 U	0.20 U	0.20 U
Toluene	1000	0.48 J	0.095 U	0.18 J	0.12 J	0.16 J
trans-1,2-Dichloroethene	100	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Trichloroethene	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	2000	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Vinyl chloride	5	0.13 U	0.13 U	0.62 J	0.13 U	3.9
Xylenes, Total	1000	0.97 J	0.43 U	0.43 U	0.43 U	0.94 J
Total Confident Conc.		19.58	1.93	2	8.89	13.16
Total Estimated Conc. (TICs)		357.7	2.75	0	0	0
VOLATILE COMPOUNDS (GC/MS)						
1,2-Dibromo-3-Chloropropane	0.02	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
1,4-Dioxane	NA	7.3	4.8	4.3	6.5	8.0
Ethylene Dibromide	0.03	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U
Total Confident Conc.		7.3	4.8	4.3	6.5	8
Total Estimated Conc. (TICs)		0	0	0	0	0
SEMIVOLATILE COMPOUNDS (GC/MS)						
1,2,4,5-Tetrachlorobenzene	NA	2.8 U	2.6 U	2.7 U	2.5 U	2.7 U
1,2,4-Trichlorobenzene	9	0.61 U	0.565 U	0.58 U	0.55 U	0.58 U
1,2-Dichlorobenzene	600	4.4 U	4 U	4.1 U	3.9 U	4.1 U
1,3-Dichlorobenzene	600	4.4 U	4.1 U	4.2 U	4.0 U	4.2 U
1,4-Dichlorobenzene	75	5.4 U	4.95 U	5.1 U	4.8 U	5.1 U
2,3,4,6-Tetrachlorophenol	NA	2.4 U	2.25 U	2.3 U	2.2 U	2.3 U
2,4,5-Trichlorophenol	700	3.0 U	2.7 U	2.8 U	2.6 U	2.8 U
2,4,6-Trichlorophenol	20	3.7 U	3.4 U	3.5 U	3.3 U	3.5 U
2,4-Dichlorophenol	20	3.2 U	3 U	3.1 U	2.9 U	3.1 U
2,4-Dimethylphenol	100	3.0 U	2.7 U	2.8 U	2.6 U	2.8 U
2,4-Dinitrophenol	40	5.7 U	5.2 U	5.3 U	5.1 U	5.3 U
2,4-Dinitrotoluene	10	0.51 U	0.465 U	0.48 U	0.45 U	0.48 U
2,6-Dinitrotoluene	NA	0.69 U	0.64 U	0.66 U	0.62 U	0.66 U
2-Chloronaphthalene	600	4.4 U	4.05 U	4.2 U	3.9 U	4.2 U
2-Chlorophenol	40	3.1 U	2.85 U	2.9 U	2.8 U	2.9 U
2-Methylnaphthalene	NA	3.6 U	3.35 U	3.4 U	3.3 U	3.4 U
2-Methylphenol	NA	2.0 U	1.75 U	1.8 U	1.7 U	1.8 U
2-Nitroaniline	NA	6.7 U	6.15 U	6.3 U	6.0 U	6.3 U
2-Nitrophenol	NA	4.0 U	3.7 U	3.8 U	3.6 U	3.8 U
3,3'-Dichlorobenzidine	30	8.2 U	7.5 U	7.7 U	7.3 U	7.7 U
3-Nitroaniline	NA	5.1 U	4.7 U	4.8 U	4.6 U	4.8 U
4,6-Dinitro-2-methylphenol	NA	6.1 U	5.65 U	5.8 U	5.5 U	5.8 U
4-Bromophenyl phenyl ether	NA	4.6 U	4.25 U	4.4 U	4.1 U	4.4 U
4-Chloro-3-methylphenol	NA	2.4 U	2.15 U	2.2 U	2.1 U	2.2 U

Notes:
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Wood-Ridge, NJ

		CF-MW-5	CF-MW-6	CF-MW-7	CF-MW-8	CF-MW-9
Sample ID	NJ Higher of	20110315CF-MW5V13SN	20110315CF-MW6V14.0N	20110315MW-7V14.37N	20110315CPMW-8V14.0N	20110315CF-MW-9V13.0N
Lab Sample No.	PQLs and	460-24182-7	460-24182-6	460-24182-5	460-24182-4	460-24182-1
Sampling Date	GW Quality	3/15/2011	3/15/2011	3/15/2011	3/15/2011	3/15/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
4-Chlorophenyl phenyl ether	NA	4.6 U	4.25 U	4.4 U	4.1 U	4.4 U
4-Methylphenol	NA	1.9 U	1.75 U	1.8 U	1.7 U	1.8 U
4-Nitroaniline	NA	4.7 U	4.3 U	4.4 U	4.2 U	4.4 U
4-Nitrophenol	NA	2.7 U	2.5 U	2.6 U	2.4 U	2.6 U
Acenaphthene	400	4.4 U	4.1 U	4.2 U	4.0 U	4.2 U
Acenaphthylene	NA	4.7 U	4.35 U	4.5 U	4.2 U	4.5 U
Anthracene	2000	4.2 U	3.8 U	3.9 U	3.7 U	3.9 U
Benzo[g,h,i]perylene	NA	3.2 U	2.95 U	3.0 U	2.9 U	3.0 U
Benzo[k]fluoranthene	0.5	0.35 U	0.325 U	0.33 U	0.32 U	0.33 U
bis (2-chloroisopropyl) ether	300	3.8 U	3.5 U	3.6 U	3.4 U	3.6 U
Bis(2-chloroethoxy)methane	NA	4.1 U	3.8 U	3.9 U	3.7 U	3.9 U
Bis(2-chloroethyl)ether	7	0.48 U	0.445 U	0.46 U	0.43 U	0.46 U
Bis(2-ethylhexyl) phthalate	3	2.8 U	2.6 U	2.7 U	2.5 U	2.7 U
Butyl benzyl phthalate	100	3.3 U	3 U	3.1 U	2.9 U	3.1 U
Carbazole	NA	3.6 U	3.3 U	3.4 U	3.2 U	3.4 U
Chrysene	5	4.4 U	4.1 U	4.2 U	4.0 U	4.2 U
Dibenz(a,h)anthracene	0.3	0.19 U	0.175 U	0.18 U	0.17 U	0.18 U
Dibenzofuran	NA	4.2 U	3.9 U	4.0 U	3.8 U	4.0 U
Diethyl phthalate	6000	4.5 U	4.1 U	4.2 U	4.0 U	4.2 U
Dimethyl phthalate	NA	3.8 U	3.5 U	3.6 U	3.4 U	3.6 U
Di-n-butyl phthalate	700	3.3 U	3 U	3.1 U	2.9 U	3.1 U
Di-n-octyl phthalate	100	2.2 U	2.05 U	2.1 U	2.0 U	2.1 U
Fluoranthene	300	3.1 U	2.85 U	2.9 U	2.8 U	2.9 U
Fluorene	300	3.8 U	3.5 U	3.6 U	3.4 U	3.6 U
Hexachlorobutadiene	1	1.1 U	0.995 U	1.0 U	0.99 U	1.0 U
Hexachlorocyclopentadiene	40	5.4 U	4.95 U	5.1 U	4.8 U	5.1 U
Hexachloroethane	7	0.59 U	0.545 U	0.56 U	0.53 U	0.56 U
Indeno[1,2,3-cd]pyrene	0.2	0.14 U	0.13 U	0.13 U	0.13 U	0.13 U
Isophorone	40	11 J	3.9 U	4.0 U	3.8 U	4.0 U
Naphthalene	300	9.7 J	4 U	4.1 U	3.9 U	4.1 U
Nitrobenzene	6	0.48 U	0.445 U	0.46 U	0.43 U	0.46 U
N-Nitrosodi-n-propylamine	10	0.38 U	0.35 U	0.36 U	0.34 U	0.36 U
N-Nitrosodiphenylamine	10	4.6 U	4.2 U	4.3 U	4.1 U	4.3 U
Phenanthrene	NA	4.2 U	3.85 U	4.0 U	3.7 U	4.0 U
Phenol	2000	1.0 U	0.965 U	0.99 U	1.8 J	0.99 U
Pyrene	200	5.0 U	4.6 U	4.7 U	4.5 U	4.7 U
Total Confident Conc.		20.7	0	0	1.8	0
Total Estimated Conc. (TICs)		1973.8	15	0	8.7	46.8

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		CF-MW-5	CF-MW-6	CF-MW-7	CF-MW-8	CF-MW-9
Sample ID	NJ Higher of	20110315CF-MW5V13SN	20110315CF-MW6V14.0N	20110315MW-7V14.37N	20110315CPMW-8V14.0N	20110315CF-MW-9V13.0N
Lab Sample No.	PQLs and	460-24182-7	460-24182-6	460-24182-5	460-24182-4	460-24182-1
Sampling Date	GW Quality	3/15/2011	3/15/2011	3/15/2011	3/15/2011	3/15/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILE COMPOUNDS (GC/MS)						
Benzo[a]anthracene	0.1	0.024 U	0.0215 U	0.022 U	0.021 U	0.022 U
Benzo[a]pyrene	0.1	0.035 U	0.0325 U	0.033 U	0.032 U	0.033 U
Benzo[b]fluoranthene	0.2	0.047 U	0.043 U	0.044 U	0.042 U	0.044 U
Hexachlorobenzene	0.02	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U
Pentachlorophenol	0.3	0.16 U	0.155 U	0.16 U	0.15 U	0.16 U
Total Confident Conc.		0	0	0	0	0
Total Estimated Conc. (TICs)		0	0	0	0	0
PESTICIDES						
4,4'-DDD	0.1	0.013 U	0.012 U	0.013 U	0.011 U	0.014 U
4,4'-DDE	0.1	0.011 U	0.01005 U	0.011 U	0.0091 U	0.011 U
4,4'-DDT	0.1	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
Aldrin	0.04	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
alpha-BHC	0.02	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
beta-BHC	0.04	0.013 U	0.012 U	0.013 U	0.011 U	0.014 U
Chlordane	0.5	0.41 U	0.375 U	0.41 U	0.34 U	0.42 U
delta-BHC	NA	0.011 U	0.01005 U	0.011 U	0.0091 U	0.011 U
Dieldrin	0.03	0.0061 U	0.0056 U	0.0061 U	0.0051 U	0.0062 U
Endosulfan I	40	0.011 U	0.01005 U	0.011 U	0.0091 U	0.011 U
Endosulfan II	40	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
Endosulfan sulfate	40	0.020 U	0.018 U	0.020 U	0.016 U	0.020 U
Endrin	2	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
Endrin aldehyde	NA	0.011 U	0.01005 U	0.011 U	0.0091 U	0.011 U
Endrin ketone	NA	0.013 U	0.012 U	0.013 U	0.011 U	0.014 U
gamma-BHC (Lindane)	0.03	0.015 U	0.0135 U	0.015 U	0.012 U	0.015 U
Heptachlor	0.05	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
Heptachlor epoxide	0.2	0.012 U	0.011 U	0.012 U	0.010 U	0.012 U
Methoxychlor	40	0.016 U	0.0145 U	0.016 U	0.013 U	0.016 U
Toxaphene	2	0.24 U	0.22 U	0.24 U	0.20 U	0.25 U
PCBs						
Aroclor 1016	0.5	0.14 U	0.14 U	0.14 U	0.13 U	0.14 U
Aroclor 1221	0.5	0.29 U	0.29 U	0.29 U	0.28 U	0.29 U
Aroclor 1232	0.5	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U
Aroclor 1242	0.5	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U
Aroclor 1248	0.5	0.25 U	0.25 U	0.25 U	0.24 U	0.25 U
Aroclor 1254	0.5	0.18 U	0.18 U	0.18 U	0.17 U	0.18 U
Aroclor 1260	0.5	0.16 U	0.16 U	0.16 U	0.15 U	0.16 U
Aroclor 1262	NA	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U
Aroclor 1268	NA	0.13 U	0.13 U	0.13 U	0.12 U	0.13 U
METALS						
Aluminum	200	190	95	92	**590**	**220**
Antimony	6	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Arsenic	3	2.3 U	2.3 U	2.3 U	2.3 U	2.3 U
Barium	6000	860	390	560	260	270
Beryllium	1	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
Cadmium	4	2.0 U	2 U	2.0 U	2.0 U	2.0 U
Calcium	NA	190000	310000	310000	290000	300000

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		CF-MW-5	CF-MW-6	CF-MW-7	CF-MW-8	CF-MW-9
Sample ID	NJ Higher of	20110315CF-MW5V13SN	20110315CF-MW6V14.0N	20110315MW-7V14.37N	20110315CPMW-8V14.0N	20110315CF-MW-9V13.0N
Lab Sample No.	PQLs and	460-24182-7	460-24182-6	460-24182-5	460-24182-4	460-24182-1
Sampling Date	GW Quality	3/15/2011	3/15/2011	3/15/2011	3/15/2011	3/15/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chromium	70	5.2	8.2	14	14	5.0
Cobalt	NA	4.1 U	4.1 U	4.1 U	7.0	4.1 U
Copper	1300	4.1 U	4.1 U	4.1 U	11	4.1 U
Iron	300	**32000**	**14500**	**67000**	**36000**	**17000**
Lead	5	**10**	**9.2**	**5.4**	**9.6**	2.8
Magnesium	NA	26000	29000	32000	39000	27000
Manganese	50	**1300**	**2600**	**4500**	**3000**	**3600**
Mercury	2	0.69	0.24	0.18 U	1.9	0.83
Nickel	100	32	34	25	15	7.2
Potassium	NA	12000	13000	17000	41000	32000
Selenium	40	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Silver	40	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Sodium	50000	**200000**	**155000**	**110000**	**160000**	**70000**
Thallium	2	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
Vanadium	60	4.3 U	5.9	5.0	4.5 J	4.3 U
Zinc	2000	32	16 U	16 U	47	32
Aluminum ,Dissolved	NA	NT	NT	NT	NT	NT
Antimony ,Dissolved	NA	NT	NT	NT	NT	NT
Arsenic ,Dissolved	NA	NT	NT	NT	NT	NT
Barium ,Dissolved	NA	NT	NT	NT	NT	NT
Beryllium ,Dissolved	NA	NT	NT	NT	NT	NT
Cadmium ,Dissolved	NA	NT	NT	NT	NT	NT
Calcium ,Dissolved	NA	NT	NT	NT	NT	NT
Chromium ,Dissolved	NA	NT	NT	NT	NT	NT
Cobalt ,Dissolved	NA	NT	NT	NT	NT	NT
Copper ,Dissolved	NA	NT	NT	NT	NT	NT
Iron ,Dissolved	NA	NT	NT	NT	NT	NT
Lead ,Dissolved	NA	NT	NT	NT	NT	NT
Magnesium ,Dissolved	NA	NT	NT	NT	NT	NT
Manganese ,Dissolved	NA	NT	NT	NT	NT	NT
Mercury ,Dissolved	NA	NT	NT	NT	NT	NT
Nickel ,Dissolved	NA	NT	NT	NT	NT	NT
Potassium ,Dissolved	NA	NT	NT	NT	NT	NT
Selenium ,Dissolved	NA	NT	NT	NT	NT	NT
Silver ,Dissolved	NA	NT	NT	NT	NT	NT
Sodium ,Dissolved	NA	NT	NT	NT	NT	NT
Thallium ,Dissolved	NA	NT	NT	NT	NT	NT
Vanadium ,Dissolved	NA	NT	NT	NT	NT	NT
Zinc ,Dissolved	NA	NT	NT	NT	NT	NT
WET CHEMISTRY						
Cyanide, Total (mg/L)	100	0.010	0.014	0.016	0.0069 J	0.0060 U

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mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the compound that was over the GWQC.

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		CF-MW-10	CF-MW-11	CF-MW-12	MW-10	MW-11
Sample ID	NJ Higher of	20110315CF-MW-10V13.0N	20110318CF-MW-11V13.0N	20110317CF-MW-12V9.5N	20110316MW-10V8N	20111206MW-11V8N
Lab Sample No.	PQLs and	460-24182-2	460-24347-1	460-24309-8	460-24264-6	460-34435-1
Sampling Date	GW Quality	3/15/2011	3/18/2011	3/17/2011	3/16/2011	12/6/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
VOLATILE COMPOUNDS (GC/MS)						
1,1,1-Trichloroethane	30	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
1,1,2,2-Tetrachloroethane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,1,2-Trichloroethane	3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethane	50	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
1,1-Dichloroethene	2	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
1,2,3-Trichlorobenzene	NA	0.83 U	0.83 U	0.83 U *	0.83 U	0.83 U
1,2,4-Trichlorobenzene	9	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,2-Dibromo-3-Chloropropane	1	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,2-Dibromoethane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,2-Dichlorobenzene	600	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
1,2-Dichloroethane	2	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
1,2-Dichloropropane	1	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
1,3-Dichlorobenzene	600	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
1,4-Dichlorobenzene	75	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
1,4-Dioxane	NA	8.4 UR	8.4 UR	8.4 UR	8.4 UR	8.4 UR
2-Butanone	300	0.82 U	3.2 J	0.82 U	0.82 U	0.82 UR
2-Hexanone	100	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
4-Methyl-2-pentanone	400	0.68 U	0.68 U	0.68 U	0.68 U	0.68 U
Acetone	700	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Benzene	1	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Bromodichloromethane	1	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
Bromoform	4	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Bromomethane	10	0.31 U	0.31 U	0.31 U	0.31 U	0.31 UJ
Carbon disulfide	800	0.15 U	0.15 U	0.15 U	0.15 U	0.44 J
Carbon tetrachloride	2	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Chlorobenzene	50	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Chloroethane	100	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Chloroform	6	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
Chloromethane	30	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
cis-1,2-Dichloroethene	70	0.20 U	0.20 U	0.20 U	0.56 J	0.20 U
cis-1,3-Dichloropropene	NA	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Cyclohexane	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Dibromochloromethane	10	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
Dichlorodifluoromethane	NA	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Ethylbenzene	700	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Freon TF	NA	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Isopropylbenzene	NA	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U
Methyl acetate	7000	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Methylcyclohexane	NA	0.090 U	0.090 U	0.090 U	0.090 U	0.090 U
Methylene Chloride	3	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U

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		CF-MW-10	CF-MW-11	CF-MW-12	MW-10	MW-11
Sample ID	NJ Higher of	20110315CF-MW-10V13.0N	20110318CF-MW-11V13.0N	20110317CF-MW-12V9.5N	20110316MW-10V8N	20111206MW-11V8N
Lab Sample No.	PQLs and	460-24182-2	460-24347-1	460-24309-8	460-24264-6	460-34435-1
Sampling Date	GW Quality	3/15/2011	3/18/2011	3/17/2011	3/16/2011	12/6/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTBE	70	0.18 U	0.18 U	0.18 U	0.69 J	0.18 U
Styrene	100	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Tetrachloroethene	1	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Toluene	1000	0.22 J	0.090 U	0.090 U	0.090 U	0.17 J
trans-1,2-Dichloroethene	100	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
trans-1,3-Dichloropropene	NA	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
Trichloroethene	1	0.18 U	0.18 U	0.18 U	0.18 U	0.18 U
Trichlorofluoromethane	2000	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
Vinyl chloride	5	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
Xylenes, Total	1000	0.43 U	0.43 U	0.43 U	0.43 U	0.80 J
Total Confident Conc.		0.22	3.2	0	1.25	1.41
Total Estimated Conc. (TICs)		0	0	0	12	0
VOLATILE COMPOUNDS (GC/MS)						
1,2-Dibromo-3-Chloropropane	0.02	0.018 U	0.018 U	0.018 U *	0.018 U	NT
1,4-Dioxane	NA	0.88 U	0.88 U	0.88 U	0.88 U	NT
Ethylene Dibromide	0.03	0.016 U	0.016 U	0.016 U	0.016 U	NT
Total Confident Conc.		0	0	0	0	NT
Total Estimated Conc. (TICs)		0	0	0	0	NT
SEMIVOLATILE COMPOUNDS (GC/MS)						
1,2,4,5-Tetrachlorobenzene	NA	2.8 U	2.7 U	2.4 U	2.4 U	2.6 U
1,2,4-Trichlorobenzene	9	0.61 U	0.58 U	0.53 U	0.53 U	0.26 U
1,2-Dichlorobenzene	600	4.4 U	4.1 U	3.8 U	3.8 U	2.5 U
1,3-Dichlorobenzene	600	4.4 U	4.2 U	3.8 U	3.8 U	2.4 U
1,4-Dichlorobenzene	75	5.4 U	5.1 U	4.7 U	4.7 U	2.5 U
2,3,4,6-Tetrachlorophenol	NA	2.4 U	2.3 U	2.1 U	2.1 U	2.5 U
2,4,5-Trichlorophenol	700	3.0 U	2.8 U	2.6 U	2.6 U	2.6 U
2,4,6-Trichlorophenol	20	3.7 U	3.5 U	3.2 U	3.2 U	2.4 U
2,4-Dichlorophenol	20	3.2 U	3.1 U	2.8 U	2.8 U	2.6 U
2,4-Dimethylphenol	100	3.0 U	2.8 U	2.6 U	2.6 U	3.4 U
2,4-Dinitrophenol	40	5.7 U	5.3 U	4.9 U	4.9 U	5.4 U
2,4-Dinitrotoluene	10	0.51 U	0.48 U	0.44 U	0.44 U	0.47 U
2,6-Dinitrotoluene	NA	0.69 U	0.66 U	0.60 U	0.60 U	0.61 U
2-Chloronaphthalene	600	4.4 U	4.2 U	3.8 U	3.8 U	2.7 U
2-Chlorophenol	40	3.1 U	2.9 U	2.7 U	2.7 U	2.2 U
2-Methylnaphthalene	NA	3.6 U	3.4 U	3.2 U	3.2 U	3.0 U
2-Methylphenol	NA	2.0 U	1.8 U	1.7 U	1.7 U	1.8 U
2-Nitroaniline	NA	6.7 U	6.3 U	5.8 U	5.8 U	4.9 U
2-Nitrophenol	NA	4.0 U	3.8 U	3.5 U	3.5 U	2.4 U
3,3'-Dichlorobenzidine	30	8.2 U	7.7 U *	7.1 U	7.1 U	4.9 U
3-Nitroaniline	NA	5.1 U	4.8 U	4.4 U	4.4 U	5.0 U
4,6-Dinitro-2-methylphenol	NA	6.1 U	5.8 U	5.3 U	5.3 U	4.7 U
4-Bromophenyl phenyl ether	NA	4.6 U	4.4 U	4.0 U	4.0 U	2.5 U
4-Chloro-3-methylphenol	NA	2.4 U	2.2 U	2.0 U	2.0 U	2.5 U

Notes:
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NT - Not tested
NR - Sample was not run for this analysis. In Quarter 1, only mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the

Table 4- Full TCL/TAL Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

		CF-MW-10	CF-MW-11	CF-MW-12	MW-10	MW-11
Sample ID	NJ Higher of	20110315CF-MW-10V13.0N	20110318CF-MW-11V13.0N	20110317CF-MW-12V9.5N	20110316MW-10V8N	20111206MW-11V8N
Lab Sample No.	PQLs and	460-24182-2	460-24347-1	460-24309-8	460-24264-6	460-34435-1
Sampling Date	GW Quality	3/15/2011	3/18/2011	3/17/2011	3/16/2011	12/6/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
4-Chlorophenyl phenyl ether	NA	4.6 U	4.4 U	4.0 U	4.0 U	2.5 U
4-Methylphenol	NA	1.9 U	1.8 U	1.6 U	1.6 U	1.6 U
4-Nitroaniline	NA	4.7 U	4.4 U	4.1 U	4.1 U	5.8 U
4-Nitrophenol	NA	2.7 U	2.6 U	2.4 U	2.4 U	6.7 U
Acenaphthene	400	4.4 U	4.2 U	3.8 U	3.8 U	2.7 U
Acenaphthylene	NA	4.7 U	4.5 U	4.1 U	4.1 U	2.7 U
Anthracene	2000	4.2 U	3.9 U	3.6 U	3.6 U	2.8 U
Benzo[g,h,i]perylene	NA	3.2 U	3.0 U	2.8 U	2.8 U	2.0 U
Benzo[k]fluoranthene	0.5	0.35 U	0.33 U	0.31 U	0.31 U	0.26 U
bis (2-chloroisopropyl) ether	300	3.8 U	3.6 U	3.3 U	3.3 U	2.0 U
Bis(2-chloroethoxy)methane	NA	4.1 U	3.9 U	3.5 U	3.5 U	2.6 U
Bis(2-chloroethyl)ether	7	0.48 U	0.46 U	0.42 U	0.42 U	0.28 U
Bis(2-ethylhexyl) phthalate	3	2.8 U	2.7 U	2.4 U	2.4 U	2.0 U
Butyl benzyl phthalate	100	3.3 U	3.1 U	2.8 U	2.8 U	2.5 U
Carbazole	NA	3.6 U	3.4 U	3.1 U	3.1 U	3.2 U
Chrysene	5	4.4 U	4.2 U	3.8 U	3.8 U	3.1 U
Dibenz(a,h)anthracene	0.3	0.19 U	0.18 U	0.16 U	0.16 U	0.090 U
Dibenzofuran	NA	4.2 U	4.0 U	3.7 U	3.7 U	2.8 U
Diethyl phthalate	6000	4.5 U	4.2 U	3.9 U	3.9 U	2.9 U
Dimethyl phthalate	NA	3.8 U	3.6 U	3.3 U	3.3 U	2.8 U
Di-n-butyl phthalate	700	3.3 U	3.1 U	2.8 U	2.8 U	2.9 U
Di-n-octyl phthalate	100	2.2 U	2.1 U	1.9 U	1.9 U	1.5 U
Fluoranthene	300	3.1 U	2.9 U	2.7 U	2.7 U	3.2 U
Fluorene	300	3.8 U	3.6 U	3.3 U	3.3 U	2.8 U
Hexachlorobutadiene	1	1.1 U	1.0 U	0.96 U	0.96 U	0.57 U
Hexachlorocyclopentadiene	40	5.4 U	5.1 U	4.7 U	4.7 U	1.7 U
Hexachloroethane	7	0.59 U	0.56 U	0.51 U	0.51 U	0.25 U
Indeno[1,2,3-cd]pyrene	0.2	0.14 U	0.13 U	0.12 U	0.12 U	0.15 U
Isophorone	40	4.2 U	4.0 U	3.7 U	3.7 U	2.7 U
Naphthalene	300	4.3 U	4.1 U	3.7 U	3.7 U	2.7 U
Nitrobenzene	6	0.48 U	0.46 U	0.42 U	0.42 U	0.30 U
N-Nitrosodi-n-propylamine	10	0.38 U	0.36 U	0.33 U	0.33 U	0.25 U
N-Nitrosodiphenylamine	10	4.6 U	4.3 U	3.9 U	3.9 U	2.9 U
Phenanthrene	NA	4.2 U	4.0 U	3.6 U	3.6 U	3.1 U
Phenol	2000	1.0 U	0.99 U	0.91 U	0.91 U	0.81 U
Pyrene	200	5.0 U	4.7 U	4.4 U	4.4 U	2.9 U
Total Confident Conc.		0	0	0	0	0
Total Estimated Conc. (TICs)		0	24	0	0	26

Notes:
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Wood-Ridge, NJ

		CF-MW-10	CF-MW-11	CF-MW-12	MW-10	MW-11
Sample ID	NJ Higher of	20110315CF-MW-10V13.0N	20110318CF-MW-11V13.0N	20110317CF-MW-12V9.5N	20110316MW-10V8N	20111206MW-11V8N
Lab Sample No.	PQLs and	460-24182-2	460-24347-1	460-24309-8	460-24264-6	460-34435-1
Sampling Date	GW Quality	3/15/2011	3/18/2011	3/17/2011	3/16/2011	12/6/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
SEMIVOLATILE COMPOUNDS (GC/MS)						
Benzo[a]anthracene	0.1	0.024 U	0.022 U	0.020 U	0.020 U	0.17
Benzo[a]pyrene	0.1	0.035 U	0.033 U	0.031 U	0.031 U	0.22
Benzo[b]fluoranthene	0.2	0.047 U	0.044 U	0.041 U	0.041 U	0.38
Hexachlorobenzene	0.02	0.012 U	0.011 U	0.010 U	0.010 U	0.010 U
Pentachlorophenol	0.3	0.16 U	0.16 U	0.14 U	0.14 U	0.43 J
Total Confident Conc.		0	0	0	0	1.2
Total Estimated Conc. (TICs)		0	0	0	0	0
PESTICIDES						
4,4'-DDD	0.1	0.013 U	0.012 U	0.012 U	0.012 U	0.011 U
4,4'-DDE	0.1	0.011 U	0.0095 U	0.0095 U	0.0098 U	0.0091 U
4,4'-DDT	0.1	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
Aldrin	0.04	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
alpha-BHC	0.02	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
beta-BHC	0.04	0.013 U	0.012 U	0.012 U	0.012 U	0.011 U
Chlordane	0.5	0.41 U	0.35 U	0.35 U	0.36 U	0.34 U
delta-BHC	NA	0.011 U	0.0095 U	0.0095 U	0.0098 U	0.0091 U
Dieldrin	0.03	0.0061 U	0.0053 U	0.0053 U	0.0054 U	0.0051 U
Endosulfan I	40	0.011 U	0.0095 U	0.0095 U	0.0098 U	0.0091 U
Endosulfan II	40	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
Endosulfan sulfate	40	0.020 U	0.017 U	0.017 U	0.017 U	0.016 U
Endrin	2	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
Endrin aldehyde	NA	0.011 U	0.0095 U	0.0095 U	0.0098 U	0.0091 U
Endrin ketone	NA	0.013 U	0.012 U	0.012 U	0.012 U	0.011 U
gamma-BHC (Lindane)	0.03	0.015 U	0.013 U	0.013 U	0.013 U	0.012 U
Heptachlor	0.05	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
Heptachlor epoxide	0.2	0.012 U	0.011 U	0.011 U	0.011 U	0.010 U
Methoxychlor	40	0.016 U	0.014 U	0.014 U	0.014 U	0.013 U
Toxaphene	2	0.24 U	0.21 U	0.21 U	0.22 U	0.20 U
PCBs						
Aroclor 1016	0.5	0.16 U	0.14 U	0.14 U	0.14 U	0.13 U
Aroclor 1221	0.5	0.35 U	0.29 U	0.30 U	0.30 U	0.28 U
Aroclor 1232	0.5	0.15 U	0.12 U	0.13 U	0.13 U	0.12 U
Aroclor 1242	0.5	0.15 U	0.12 U	0.13 U	0.13 U	0.12 U
Aroclor 1248	0.5	0.30 U	0.25 U	0.26 U	0.26 U	0.24 U
Aroclor 1254	0.5	0.21 U	0.18 U	0.18 U	0.18 U	0.17 U
Aroclor 1260	0.5	0.19 U	0.16 U	0.16 U	0.16 U	0.15 U
Aroclor 1262	NA	0.15 U	0.12 U	0.13 U	0.13 U	0.12 U
Aroclor 1268	NA	0.15 U	0.12 U	0.13 U	0.13 U	0.12 U
METALS						
Aluminum	200	**4100**	**520**	**950**	**3300**	**1600**
Antimony	6	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U
Arsenic	3	2.3 U	2.3 U	2.3 J	2.3 U	**14**
Barium	6000	19	59	49	460	75
Beryllium	1	0.72 U	0.72 U	0.72 U	0.72 U	0.90 U
Cadmium	4	2.0 U	2.0 U	2.0 U	2.0 U	1.9 U
Calcium	NA	90000	110000	78000	120000	54000

Notes:
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Wood-Ridge, NJ

		CF-MW-10	CF-MW-11	CF-MW-12	MW-10	MW-11
Sample ID	NJ Higher of	20110315CF-MW-10V13.0N	20110318CF-MW-11V13.0N	20110317CF-MW-12V9.5N	20110316MW-10V8N	20111206MW-11V8N
Lab Sample No.	PQLs and	460-24182-2	460-24347-1	460-24309-8	460-24264-6	460-34435-1
Sampling Date	GW Quality	3/15/2011	3/18/2011	3/17/2011	3/16/2011	12/6/2011
Matrix	2005 Criteria	Water	Water	Water	Water	Water
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Chromium	70	8.8	3.7 U	3.7 U	25	4.0 U
Cobalt	NA	4.1 U	4.1 U	4.1 U	4.1 U	3.9 U
Copper	1300	23	12	16	24	15
Iron	300	**1700**	**1200**	**2000**	**5000**	**5100**
Lead	5	1.2 U	1.2 U	1.5	3.1	5.9
Magnesium	NA	600	15000	13000	19000	9000
Manganese	50	**86**	**3100**	**700**	**2300**	**400**
Mercury	2	0.18 U	0.22	0.18 U	**18**	1.5
Nickel	100	4.3 U	5.8	5.6	13	5.4
Potassium	NA	36000	33000	51000	2100	5700
Selenium	40	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
Silver	40	4.0 U	4.0 U	4.0 U	4.0 U	3.8 U
Sodium	50000	**52000**	26000	29000	29000	49000
Thallium	2	0.78 U	0.78 U	0.78 U	0.78 U	0.76 U
Vanadium	60	12	4.3 U	5.7	12	8.0
Zinc	2000	16 U	16 U	16 U	20	33
Aluminum ,Dissolved	NA	NT	NT	NT	48 U	NT
Antimony ,Dissolved	NA	NT	NT	NT	1.8 U	NT
Arsenic ,Dissolved	NA	NT	NT	NT	2.3 U	3.0
Barium ,Dissolved	NA	NT	NT	NT	410	NT
Beryllium ,Dissolved	NA	NT	NT	NT	0.72 U	NT
Cadmium ,Dissolved	NA	NT	NT	NT	2.0 U	NT
Calcium ,Dissolved	NA	NT	NT	NT	120000	NT
Chromium ,Dissolved	NA	NT	NT	NT	3.7 U	NT
Cobalt ,Dissolved	NA	NT	NT	NT	4.1 U	NT
Copper ,Dissolved	NA	NT	NT	NT	4.1 U	NT
Iron ,Dissolved	NA	NT	NT	NT	130 U	NT
Lead ,Dissolved	NA	NT	NT	NT	1.2 U	NT
Magnesium ,Dissolved	NA	NT	NT	NT	18000	NT
Manganese ,Dissolved	NA	NT	NT	NT	1300	NT
Mercury ,Dissolved	NA	NT	NT	NT	0.18 U	NT
Nickel ,Dissolved	NA	NT	NT	NT	4.3 U	NT
Potassium ,Dissolved	NA	NT	NT	NT	1400	NT
Selenium ,Dissolved	NA	NT	NT	NT	1.9 U	NT
Silver ,Dissolved	NA	NT	NT	NT	4.0 U	NT
Sodium ,Dissolved	NA	NT	NT	NT	30000	NT
Thallium ,Dissolved	NA	NT	NT	NT	0.78 U	NT
Vanadium ,Dissolved	NA	NT	NT	NT	4.3 U	NT
Zinc ,Dissolved	NA	NT	NT	NT	16 U	NT
WET CHEMISTRY						
Cyanide, Total (mg/L)	100	0.21	0.0060 U	0.0060 U	0.0060 U	0.0014 U

Notes:

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J - The reported value is an estimated concentration

R - This results was rejected in the data validation stage

NT - Not tested

mercury triggered the dissolved metals analysis to be run (for both arsenic and mercury, and the filtered sample was not run if only arsenic exceeded the site related GWQC. Starting in Quarter 4, arsenic also triggered a dissolved metals analysis. However, the dissolved metal analysis was only run on the compound that was over the GWQC.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				3/1/2011				3/10/2011			
Monitoring Well I.D.	Northing NAD83	Easting NAD83	Survey Top of Casing Elev.[1] NGVD1929	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT
BW-PZ-1	731221.93	608651.47	5.41	1.00	4.41	4.70	-0.29	0.77	4.64	4.70	-0.06
BW-MW-1	731232.46	608659.01	5.62	1.23	4.39			1.01	4.61		
BW-PZ-2	731122.20	608785.03	5.62	1.19	4.43	4.99	-0.56	0.97	4.65	4.99	-0.34
BW-MW-2	731132.11	608792.88	5.83	1.40	4.43			1.30	4.53		
BW-PZ-3	731025.82	608790.21	5.29	1.00	4.29	5.24	-0.95	0.68	4.61	5.24	-0.63
BW-MW-3	730985.97	608838.74	10.77	7.05	3.72			6.72	4.05		
BW-PZ-4	730883.74	608700.33	5.23	0.81	4.42	5.08	-0.65	0.63	4.60	5.08	-0.47
BW-MW-4	730852.99	608741.21	10.69	7.17	3.52			6.64	4.05		
BW-PZ-5	730876.54	608596.12	4.67	0.24	4.43	3.95	0.48	0.00	4.67	3.95	0.72
BW-MW-5	730824.35	608557.61	12.18	8.54	3.64			8.51	3.67		
BW-PZ-6	730958.19	608486.71	4.41	0.21	4.20	3.90	0.30	0.00	4.41	3.90	0.51
BW-MW-6	730904.66	608479.73	8.95	5.26	3.69			5.02	3.93		
BW-PZ-7	731069.53	608451.64	4.80	0.35	4.45	3.13	1.33	0.17	4.63	3.13	1.51
BW-MW-7	731086.88	608429.05	4.89	0.00	4.89			0.00	4.89		
BW-PZ-8	731220.67	608564.35	5.11	0.63	4.48	3.71	0.77	0.36	4.75	3.71	1.04
BW-MW-8	731236.98	608540.79	5.02	0.20	4.82			0.06	4.96		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				3/24/2011				3/29/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	1.51	3.90	4.70	-0.80	1.65	3.76	4.70	-0.94
BW-MW-1	731232.46	608659.01	5.62	1.03	4.59			1.71	3.91		
BW-PZ-2	731122.20	608785.03	5.62	1.52	4.10	4.99	-0.89	1.88	3.74	4.99	-1.25
BW-MW-2	731132.11	608792.88	5.83	1.18	4.65			1.76	4.07		
BW-PZ-3	731025.82	608790.21	5.29	1.47	3.82	5.24	-1.42	1.65	3.64	5.24	-1.60
BW-MW-3	730985.97	608838.74	10.77	6.90	3.87			7.26	3.51		
BW-PZ-4	730883.74	608700.33	5.23	1.74	3.49	5.08	-1.58	1.50	3.73	5.08	-1.34
BW-MW-4	730852.99	608741.21	10.69	6.78	3.91			7.15	3.54		
BW-PZ-5	730876.54	608596.12	4.67	1.16	3.51	3.95	-0.44	0.95	3.72	3.95	-0.23
BW-MW-5	730824.35	608557.61	12.18	8.36	3.82			8.76	3.42		
BW-PZ-6	730958.19	608486.71	4.41	0.81	3.60	3.90	-0.30	0.71	3.70	3.90	-0.20
BW-MW-6	730904.66	608479.73	8.95	4.99	3.96			5.54	3.41		
BW-PZ-7	731069.53	608451.64	4.80	0.49	4.31	3.13	1.19	0.82	3.98	3.13	0.86
BW-MW-7	731086.88	608429.05	4.89	0.00	4.89			0.00	4.89		
BW-PZ-8	731220.67	608564.35	5.11	0.81	4.30	3.71	0.59	1.11	4.00	3.71	0.29
BW-MW-8	731236.98	608540.79	5.02	0.12	4.90			0.46	4.56		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				4/5/2011				4/12/2011			
Monitoring Well I.D.	Northing	Easting	Survey Top of Casing Elev.[1]	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	1.26	4.15	4.70	-0.55	1.27	4.14	4.70	-0.56
BW-MW-1	731232.46	608659.01	5.62	1.71	3.91			2.08	3.54		
BW-PZ-2	731122.20	608785.03	5.62	1.46	4.16	4.99	-0.83	1.44	4.18	4.99	-0.81
BW-MW-2	731132.11	608792.88	5.83	1.93	3.90			2.23	3.60		
BW-PZ-3	731025.82	608790.21	5.29	1.15	4.14	5.24	-1.10	1.16	4.13	5.24	-1.11
BW-MW-3	730985.97	608838.74	10.77	7.17	3.60			7.55	3.22		
BW-PZ-4	730883.74	608700.33	5.23	1.10	4.13	5.08	-0.94	1.05	4.18	5.08	-0.89
BW-MW-4	730852.99	608741.21	10.69	6.82	3.87			7.31	3.38		
BW-PZ-5	730876.54	608596.12	4.67	0.65	4.02	3.95	0.07	0.50	4.17	3.95	0.22
BW-MW-5	730824.35	608557.61	12.18	8.66	3.52			8.84	3.34		
BW-PZ-6	730958.19	608486.71	4.41	0.26	4.15	3.90	0.25	0.25	4.16	3.90	0.26
BW-MW-6	730904.66	608479.73	8.95	5.38	3.57			5.52	3.43		
BW-PZ-7	731069.53	608451.64	4.80	0.81	3.99	3.13	0.87	0.56	4.24	3.13	1.12
BW-MW-7	731086.88	608429.05	4.89	0.00	4.89			0.04	4.85		
BW-PZ-8	731220.67	608564.35	5.11	1.10	4.01	3.71	0.30	0.91	4.20	3.71	0.49
BW-MW-8	731236.98	608540.79	5.02	0.41	4.61			0.69	4.33		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				4/19/2011				4/26/2011			
Monitoring Well I.D.	Northing NAD83	Easting NAD83	Survey Top of Casing Elev.[1] NGVD1929	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT
BW-PZ-1	731221.93	608651.47	5.41	0.89	4.52	4.70	-0.18	0.81	4.60	4.70	-0.10
BW-MW-1	731232.46	608659.01	5.62	1.19	4.43			1.23	4.39		
BW-PZ-2	731122.20	608785.03	5.62	1.04	4.58	4.99	-0.41	1.01	4.61	4.99	-0.38
BW-MW-2	731132.11	608792.88	5.83	1.41	4.42			1.43	4.40		
BW-PZ-3	731025.82	608790.21	5.29	0.79	4.50	5.24	-0.74	0.73	4.56	5.24	-0.68
BW-MW-3	730985.97	608838.74	10.77	6.94	3.83			6.93	3.84		
BW-PZ-4	730883.74	608700.33	5.23	0.70	4.53	5.08	-0.54	0.62	4.61	5.08	-0.46
BW-MW-4	730852.99	608741.21	10.69	6.93	3.76			6.75	3.94		
BW-PZ-5	730876.54	608596.12	4.67	0.02	4.65	3.95	0.70	0.05	4.62	3.95	0.67
BW-MW-5	730824.35	608557.61	12.18	8.70	3.48			8.66	3.52		
BW-PZ-6	730958.19	608486.71	4.41	0.00	4.41	3.90	0.51	0.00	4.41	3.90	0.51
BW-MW-6	730904.66	608479.73	8.95	5.36	3.59			5.37	3.58		
BW-PZ-7	731069.53	608451.64	4.80	0.21	4.59	3.13	1.47	0.19	4.61	3.13	1.49
BW-MW-7	731086.88	608429.05	4.89	0.00	4.89			0.00	4.89		
BW-PZ-8	731220.67	608564.35	5.11	0.76	4.35	3.71	0.64	0.60	4.51	3.71	0.80
BW-MW-8	731236.98	608540.79	5.02	0.22	4.80			0.20	4.82		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				5/12/2011				5/19/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	1.85	3.56	4.70	-1.14	1.91	3.50	4.70	-1.20
BW-MW-1	731232.46	608659.01	5.62	2.04	3.58			1.05	4.57		
BW-PZ-2	731122.20	608785.03	5.62	1.92	3.70	4.99	-1.29	2.05	3.57	4.99	-1.42
BW-MW-2	731132.11	608792.88	5.83	2.13	3.70			1.24	4.59		
BW-PZ-3	731025.82	608790.21	5.29	1.81	3.48	5.24	-1.76	1.85	3.44	5.24	-1.80
BW-MW-3	730985.97	608838.74	10.77	7.54	3.23			6.76	4.01		
BW-PZ-4	730883.74	608700.33	5.23	2.49	2.74	5.08	-2.33	1.77	3.46	5.08	-1.61
BW-MW-4	730852.99	608741.21	10.69	7.16	3.53			6.95	3.74		
BW-PZ-5	730876.54	608596.12	4.67	1.42	3.25	3.95	-0.70	1.23	3.44	3.95	-0.51
BW-MW-5	730824.35	608557.61	12.18	8.81	3.37			8.40	3.78		
BW-PZ-6	730958.19	608486.71	4.41	1.11	3.30	3.90	-0.60	0.91	3.50	3.90	-0.40
BW-MW-6	730904.66	608479.73	8.95	5.58	3.37			5.05	3.90		
BW-PZ-7	731069.53	608451.64	4.80	0.86	3.94	3.13	0.82	1.01	3.79	3.13	0.67
BW-MW-7	731086.88	608429.05	4.89	0.27	4.62			0.00	4.89		
BW-PZ-8	731220.67	608564.35	5.11	1.30	3.81	3.71	0.10	1.33	3.78	3.71	0.07
BW-MW-8	731236.98	608540.79	5.02	0.75	4.27			0.29	4.73		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				5/26/2011				6/2/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.**[1]	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	1.45	3.96	4.70	-0.74	1.28	4.13	4.70	-0.57
BW-MW-1	731232.46	608659.01	5.62	1.6	4.02			2.03	3.59		
BW-PZ-2	731122.20	608785.03	5.62	1.68	3.94	4.99	-1.05	1.47	4.15	4.99	-0.84
BW-MW-2	731132.11	608792.88	5.83	1.75	4.08			2.15	3.68		
BW-PZ-3	731025.82	608790.21	5.29	1.41	3.88	5.24	-1.36	1.16	4.13	5.24	-1.11
BW-MW-3	730985.97	608838.74	10.77	7.09	3.68			7.32	3.45		
BW-PZ-4	730883.74	608700.33	5.23	1.32	3.91	5.08	-1.16	1.11	4.12	5.08	-0.95
BW-MW-4	730852.99	608741.21	10.69	6.91	3.78			6.96	3.73		
BW-PZ-5	730876.54	608596.12	4.67	0.72	3.95	3.95	0.00	0.57	4.10	3.95	0.15
BW-MW-5	730824.35	608557.61	12.18	8.78	3.40			8.82	3.36		
BW-PZ-6	730958.19	608486.71	4.41	0.5	3.91	3.90	0.01	0.32	4.09	3.90	0.19
BW-MW-6	730904.66	608479.73	8.95	5.41	3.54			5.55	3.40		
BW-PZ-7	731069.53	608451.64	4.80	0.75	4.05	3.13	0.93	0.56	4.24	3.13	1.12
BW-MW-7	731086.88	608429.05	4.89	0.00	4.89			0.37	4.52		
BW-PZ-8	731220.67	608564.35	5.11	1.08	4.03	3.71	0.32	0.91	4.20	3.71	0.49
BW-MW-8	731236.98	608540.79	5.02	0.53	4.49			0.81	4.21		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				6/9/2011				6/10/2011			
Monitoring Well I.D.	Northing	Easting	Survey Top of Casing Elev.[1]	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	1.60	3.81	4.70	-0.89	2.06	3.35	4.70	-1.35
BW-MW-1	731232.46	608659.01	5.62	2.41	3.21			2.61	3.01		
BW-PZ-2	731122.20	608785.03	5.62	1.77	3.85	4.99	-1.14	2.00	3.62	4.99	-1.37
BW-MW-2	731132.11	608792.88	5.83	2.57	3.26			2.32	3.51		
BW-PZ-3	731025.82	608790.21	5.29	1.51	3.78	5.24	-1.46	2.15	3.14	5.24	-2.10
BW-MW-3	730985.97	608838.74	10.77	7.51	3.26			7.53	3.24		
BW-PZ-4	730883.74	608700.33	5.23	1.83	3.40	5.08	-1.67	2.55	2.68	5.08	-2.39
BW-MW-4	730852.99	608741.21	10.69	7.11	3.58			7.24	3.45		
BW-PZ-5	730876.54	608596.12	4.67	1.25	3.42	3.95	-0.53	1.48	3.19	3.95	-0.76
BW-MW-5	730824.35	608557.61	12.18	8.91	3.27			8.87	3.31		
BW-PZ-6	730958.19	608486.71	4.41	0.85	3.56	3.90	-0.34	1.24	3.17	3.90	-0.73
BW-MW-6	730904.66	608479.73	8.95	5.75	3.20			5.62	3.33		
BW-PZ-7	731069.53	608451.64	4.80	0.68	4.12	3.13	1.00	1.20	3.60	3.13	0.48
BW-MW-7	731086.88	608429.05	4.89	0.62	4.27			0.60	4.29		
BW-PZ-8	731220.67	608564.35	5.11	1.10	4.01	3.71	0.30	1.56	3.55	3.71	-0.16
BW-MW-8	731236.98	608540.79	5.02	1.15	3.87			1.10	3.92		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				6/15/2011				6/23/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	2.04	3.37	4.70	-1.33	1.85	3.56	4.70	-1.14
BW-MW-1	731232.46	608659.01	5.62	2.25	3.37			2.02	3.60		
BW-PZ-2	731122.20	608785.03	5.62	2.35	3.27	4.99	-1.72	2.02	3.60	4.99	-1.39
BW-MW-2	731132.11	608792.88	5.83	2.48	3.35			2.19	3.64		
BW-PZ-3	731025.82	608790.21	5.29	2.35	2.94	5.24	-2.30	1.79	3.50	5.24	-1.74
BW-MW-3	730985.97	608838.74	10.77	7.47	3.30			7.36	3.41		
BW-PZ-4	730883.74	608700.33	5.23	2.33	2.90	5.08	-2.17	1.71	3.52	5.08	-1.55
BW-MW-4	730852.99	608741.21	10.69	7.15	3.54			7.10	3.59		
BW-PZ-5	730876.54	608596.12	4.67	1.52	3.15	3.95	-0.80	1.16	3.51	3.95	-0.44
BW-MW-5	730824.35	608557.61	12.18	8.78	3.40			8.87	3.31		
BW-PZ-6	730958.19	608486.71	4.41	1.16	3.25	3.90	-0.65	0.92	3.49	3.90	-0.41
BW-MW-6	730904.66	608479.73	8.95	5.59	3.36			5.57	3.38		
BW-PZ-7	731069.53	608451.64	4.80	1.41	3.39	3.13	0.27	1.08	3.72	3.13	0.60
BW-MW-7	731086.88	608429.05	4.89	0.54	4.35			0.38	4.51		
BW-PZ-8	731220.67	608564.35	5.11	1.68	3.43	3.71	-0.28	1.41	3.70	3.71	-0.01
BW-MW-8	731236.98	608540.79	5.02	1.06	3.96			0.87	4.15		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				6/28/2011				6/30/2011			
Monitoring Well I.D.	Northing NAD83	Easting NAD83	Survey Top of Casing Elev.[1] NGVD1929	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT	Measured Depth to Gw Table (FT) FTOC (0.0')	Gw Elevation (FT) NGVD 1929	Approx Top of VBW Elev. NGVD 1929	Δ Elev. of VBW and GW FT
BW-PZ-1	731221.93	608651.47	5.41	1.72	3.69	4.70	-1.01	2.00	3.41	4.70	-1.29
BW-MW-1	731232.46	608659.01	5.62	2.08	3.54			2.26	3.36		
BW-PZ-2	731122.20	608785.03	5.62	1.91	3.71	4.99	-1.28	2.12	3.50	4.99	-1.49
BW-MW-2	731132.11	608792.88	5.83	2.20	3.63			2.35	3.48		
BW-PZ-3	731025.82	608790.21	5.29	1.67	3.62	5.24	-1.62	2.28	3.01	5.24	-2.23
BW-MW-3	730985.97	608838.74	10.77	7.41	3.36			7.54	3.23		
BW-PZ-4	730883.74	608700.33	5.23	1.55	3.68	5.08	-1.39	2.57	2.66	5.08	-2.41
BW-MW-4	730852.99	608741.21	10.69	7.16	3.53			7.32	3.37		
BW-PZ-5	730876.54	608596.12	4.67	1.02	3.65	3.95	-0.30	1.51	3.16	3.95	-0.79
BW-MW-5	730824.35	608557.61	12.18	8.85	3.33			8.90	3.28		
BW-PZ-6	730958.19	608486.71	4.41	0.75	3.66	3.90	-0.24	1.26	3.15	3.90	-0.75
BW-MW-6	730904.66	608479.73	8.95	5.58	3.37			5.65	3.30		
BW-PZ-7	731069.53	608451.64	4.80	0.97	3.83	3.13	0.71	1.21	3.59	3.13	0.47
BW-MW-7	731086.88	608429.05	4.89	0.45	4.44			0.58	4.31		
BW-PZ-8	731220.67	608564.35	5.11	1.31	3.80	3.71	0.09	1.55	3.56	3.71	-0.15
BW-MW-8	731236.98	608540.79	5.02	0.92	4.10			1.05	3.97		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				7/8/2011				7/14/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.[1]**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	2.05	3.36	4.70	-1.34	2.15	3.26	4.70	-1.44
BW-MW-1	731232.46	608659.01	5.62	2.65	2.97			3.1	2.52		
BW-PZ-2	731122.20	608785.03	5.62	2.28	3.34	4.99	-1.65	2.41	3.21	4.99	-1.78
BW-MW-2	731132.11	608792.88	5.83	2.85	2.98			3.2	2.63		
BW-PZ-3	731025.82	608790.21	5.29	2.3	2.99	5.24	-2.25	2.16	3.13	5.24	-2.11
BW-MW-3	730985.97	608838.74	10.77	7.72	3.05			7.92	2.85		
BW-PZ-4	730883.74	608700.33	5.23	2.34	2.89	5.08	-2.18	2.03	3.20	5.08	-1.87
BW-MW-4	730852.99	608741.21	10.69	7.36	3.33			7.61	3.08		
BW-PZ-5	730876.54	608596.12	4.67	1.47	3.20	3.95	-0.75	1.48	3.19	3.95	-0.76
BW-MW-5	730824.35	608557.61	12.18	8.93	3.25			8.97	3.21		
BW-PZ-6	730958.19	608486.71	4.41	1.28	3.13	3.90	-0.77	1.2	3.21	3.90	-0.69
BW-MW-6	730904.66	608479.73	8.95	5.71	3.24			5.84	3.11		
BW-PZ-7	731069.53	608451.64	4.80	0.81	3.99	3.13	0.87	1.5	3.30	3.13	0.18
BW-MW-7	731086.88	608429.05	4.89	1.33	3.56			0.99	3.90		
BW-PZ-8	731220.67	608564.35	5.11	1.67	3.44	3.71	-0.27	1.81	3.30	3.71	-0.41
BW-MW-8	731236.98	608540.79	5.02	1.34	3.68			1.52	3.50		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				7/28/2011				8/2/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.**[1]	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	2.04	3.37	4.70	-1.33	1.95	3.46	4.70	-1.24
BW-MW-1	731232.46	608659.01	5.62	3.58	2.04			3.31	2.31		
BW-PZ-2	731122.20	608785.03	5.62	2.25	3.37	4.99	-1.62	2.14	3.48	4.99	-1.51
BW-MW-2	731132.11	608792.88	5.83	3.71	2.12			3.37	2.46		
BW-PZ-3	731025.82	608790.21	5.29	1.93	3.36	5.24	-1.88	1.9	3.39	5.24	-1.85
BW-MW-3	730985.97	608838.74	10.77	8.09	2.68			7.9	2.87		
BW-PZ-4	730883.74	608700.33	5.23	1.83	3.40	5.08	-1.67	1.75	3.48	5.08	-1.59
BW-MW-4	730852.99	608741.21	10.69	7.72	2.97			7.53	3.16		
BW-PZ-5	730876.54	608596.12	4.67	1.27	3.40	3.95	-0.55	1.19	3.48	3.95	-0.47
BW-MW-5	730824.35	608557.61	12.18	9.12	3.06			8.96	3.22		
BW-PZ-6	730958.19	608486.71	4.41	1.01	3.40	3.90	-0.50	0.92	3.49	3.90	-0.41
BW-MW-6	730904.66	608479.73	8.95	5.97	2.98			5.83	3.12		
BW-PZ-7	731069.53	608451.64	4.80	1.35	3.45	3.13	0.33	1.33	3.47	3.13	0.35
BW-MW-7	731086.88	608429.05	4.89	1.24	3.65			1.11	3.78		
BW-PZ-8	731220.67	608564.35	5.11	1.73	3.38	3.71	-0.33	1.65	3.46	3.71	-0.25
BW-MW-8	731236.98	608540.79	5.02	1.84	3.18			1.72	3.30		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				8/16/2011				8/23/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.**[1]	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	1.86	3.55	4.70	-1.15	2.01	3.40	4.70	-1.30
BW-MW-1	731232.46	608659.01	5.62	1.39	4.23			1.62	4.00		
BW-PZ-2	731122.20	608785.03	5.62	1.98	3.64	4.99	-1.35	2.2	3.42	4.99	-1.57
BW-MW-2	731132.11	608792.88	5.83	1.5	4.33			1.78	4.05		
BW-PZ-3	731025.82	608790.21	5.29	2.05	3.24	5.24	-2.00	2.04	3.25	5.24	-1.99
BW-MW-3	730985.97	608838.74	10.77	6.98	3.79			7.38	3.39		
BW-PZ-4	730883.74	608700.33	5.23	2.25	2.98	5.08	-2.09	1.95	3.28	5.08	-1.79
BW-MW-4	730852.99	608741.21	10.69	7.19	3.50			7.31	3.38		
BW-PZ-5	730876.54	608596.12	4.67	1.35	3.32	3.95	-0.63	1.32	3.35	3.95	-0.60
BW-MW-5	730824.35	608557.61	12.18	8.45	3.73			8.70	3.48		
BW-PZ-6	730958.19	608486.71	4.41	0.88	3.53	3.90	-0.37	1.07	3.34	3.90	-0.56
BW-MW-6	730904.66	608479.73	8.95	5.25	3.70			5.49	3.46		
BW-PZ-7	731069.53	608451.64	4.80	1.12	3.68	3.13	0.56	1.18	3.62	3.13	0.50
BW-MW-7	731086.88	608429.05	4.89	0.18	4.71			0.21	4.68		
BW-PZ-8	731220.67	608564.35	5.11	1.4	3.71	3.71	0.00	1.51	3.60	3.71	-0.11
BW-MW-8	731236.98	608540.79	5.02	0.55	4.47			0.63	4.39		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				8/29/2011				9/6/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.[1]** NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	1.42	3.99	4.70	-0.71	1.28	4.13	4.70	-0.57
BW-MW-1	731232.46	608659.01	5.62	0.83	4.79			1.73	3.89		
BW-PZ-2	731122.20	608785.03	5.62	1.05	4.57	4.99	-0.42	1.45	4.17	4.99	-0.82
BW-MW-2	731132.11	608792.88	5.83	1.02	4.81			1.95	3.88		
BW-PZ-3	731025.82	608790.21	5.29	1.48	3.81	5.24	-1.43	1.21	4.08	5.24	-1.16
BW-MW-3	730985.97	608838.74	10.77	6.75	4.02			7.26	3.51		
BW-PZ-4	730883.74	608700.33	5.23	1.28	3.95	5.08	-1.12	1.1	4.13	5.08	-0.94
BW-MW-4	730852.99	608741.21	10.69	7.16	3.53			7.21	3.48		
BW-PZ-5	730876.54	608596.12	4.67	0.78	3.89	3.95	-0.06	0.6	4.07	3.95	0.12
BW-MW-5	730824.35	608557.61	12.18	8.32	3.86			8.61	3.57		
BW-PZ-6	730958.19	608486.71	4.41	0.95	3.46	3.90	-0.44	0.18	4.23	3.90	0.33
BW-MW-6	730904.66	608479.73	8.95	5.11	3.84			5.26	3.69		
BW-PZ-7	731069.53	608451.64	4.80	0.75	4.05	3.13	0.93	0.63	4.17	3.13	1.05
BW-MW-7	731086.88	608429.05	4.89	*0.00	NA			0.82	4.07		
BW-PZ-8	731220.67	608564.35	5.11	0.94	4.17	3.71	0.46	0.91	4.20	3.71	0.49
BW-MW-8	731236.98	608540.79	5.02	0.08	4.94			0.82	4.20		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				9/13/2011				9/20/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.[1]**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	1.92	3.49	4.70	-1.21	1.93	3.48	4.70	-1.22
BW-MW-1	731232.46	608659.01	5.62	1.45	4.17			2.03	3.59		
BW-PZ-2	731122.20	608785.03	5.62	2.15	3.47	4.99	-1.52	2.1	3.52	4.99	-1.47
BW-MW-2	731132.11	608792.88	5.83	1.7	4.13			2.25	3.58		
BW-PZ-3	731025.82	608790.21	5.29	2.2	3.09	5.24	-2.15	2.05	3.24	5.24	-2.00
BW-MW-3	730985.97	608838.74	10.77	6.88	3.89			7.35	3.42		
BW-PZ-4	730883.74	608700.33	5.23	2.15	3.08	5.08	-1.99	2.51	2.72	5.08	-2.35
BW-MW-4	730852.99	608741.21	10.69	6.75	3.94			7.15	3.54		
BW-PZ-5	730876.54	608596.12	4.67	1.36	3.31	3.95	-0.64	1.38	3.29	3.95	-0.66
BW-MW-5	730824.35	608557.61	12.18	8.51	3.67			8.70	3.48		
BW-PZ-6	730958.19	608486.71	4.41	1.15	3.26	3.90	-0.64	1.09	3.32	3.90	-0.58
BW-MW-6	730904.66	608479.73	8.95	5.3	3.65			5.52	3.43		
BW-PZ-7	731069.53	608451.64	4.80	1.18	3.62	3.13	0.50	1.06	3.74	3.13	0.62
BW-MW-7	731086.88	608429.05	4.89	*0.00	NA			0.43	4.46		
BW-PZ-8	731220.67	608564.35	5.11	0.46	4.65	3.71	0.94	1.5	3.61	3.71	-0.10
BW-MW-8	731236.98	608540.79	5.02	1.42	3.60			0.85	4.17		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				9/27/2011				10/4/2011			
Monitoring Well I.D.	Northing	Easting	Survey Top of Casing Elev.[1]	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	2	3.41	4.70	-1.29	2.03	3.38	4.70	-1.32
BW-MW-1	731232.46	608659.01	5.62	1.91	3.71			1.74	3.88		
BW-PZ-2	731122.20	608785.03	5.62	2.27	3.35	4.99	-1.64	2.41	3.21	4.99	-1.78
BW-MW-2	731132.11	608792.88	5.83	2.09	3.74			1.92	3.91		
BW-PZ-3	731025.82	608790.21	5.29	2.35	2.94	5.24	-2.30	2.42	2.87	5.24	-2.37
BW-MW-3	730985.97	608838.74	10.77	7.38	3.39			7.36	3.41		
BW-PZ-4	730883.74	608700.33	5.23	2.58	2.65	5.08	-2.42	2.52	2.71	5.08	-2.36
BW-MW-4	730852.99	608741.21	10.69	7.19	3.50			7.42	3.27		
BW-PZ-5	730876.54	608596.12	4.67	1.54	3.13	3.95	-0.82	1.56	3.11	3.95	-0.84
BW-MW-5	730824.35	608557.61	12.18	8.72	3.46			8.61	3.57		
BW-PZ-6	730958.19	608486.71	4.41	2.28	2.13	3.90	-1.77	1.27	3.14	3.90	-0.76
BW-MW-6	730904.66	608479.73	8.95	5.42	3.53			5.43	3.52		
BW-PZ-7	731069.53	608451.64	4.80	1.32	3.48	3.13	0.36	1.30	3.50	3.13	0.38
BW-MW-7	731086.88	608429.05	4.89	0.40	4.49			0.24	4.65		
BW-PZ-8	731220.67	608564.35	5.11	1.6	3.51	3.71	-0.20	1.58	3.53	3.71	-0.18
BW-MW-8	731236.98	608540.79	5.02	0.76	4.26			0.69	4.33		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
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OU-1 Vertical Barrier Wall Groundwater Monitoring				10/11/2011				10/18/2011			
Monitoring Well I.D.	**Northing**	**Easting**	**Survey Top of Casing Elev.**[1]	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**	**Measured Depth to Gw Table (FT)**	**Gw Elevation (FT)**	**Approx Top of VBW Elev.**	**Δ Elev. of VBW and GW**
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	2.08	3.33	4.70	-1.37	2.05	3.36	4.70	-1.34
BW-MW-1	731232.46	608659.01	5.62	2.31	3.31			1.99	3.63		
BW-PZ-2	731122.20	608785.03	5.62	2.40	3.22	4.99	-1.77	2.47	3.15	4.99	-1.84
BW-MW-2	731132.11	608792.88	5.83	2.49	3.34			2.15	3.68		
BW-PZ-3	731025.82	608790.21	5.29	2.48	2.81	5.24	-2.43	2.46	2.83	5.24	-2.41
BW-MW-3	730985.97	608838.74	10.77	7.75	3.02			7.59	3.18		
BW-PZ-4	730883.74	608700.33	5.23	2.60	2.63	5.08	-2.44	2.62	2.61	5.08	-2.46
BW-MW-4	730852.99	608741.21	10.69	7.48	3.21			7.43	3.26		
BW-PZ-5	730876.54	608596.12	4.67	1.56	3.11	3.95	-0.84	1.58	3.09	3.95	-0.86
BW-MW-5	730824.35	608557.61	12.18	8.72	3.46			8.69	3.49		
BW-PZ-6	730958.19	608486.71	4.41	1.28	3.13	3.90	-0.77	1.26	3.15	3.90	-0.75
BW-MW-6	730904.66	608479.73	8.95	5.60	3.35			5.54	3.41		
BW-PZ-7	731069.53	608451.64	4.80	1.35	3.45	3.13	0.33	1.25	3.55	3.13	0.43
BW-MW-7	731086.88	608429.05	4.89	0.49	4.40			0.40	4.49		
BW-PZ-8	731220.67	608564.35	5.11	1.65	3.46	3.71	-0.25	1.64	3.47	3.71	-0.24
BW-MW-8	731236.98	608540.79	5.02	1.05	3.97			0.84	4.18		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				10/25/2011				11/1/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	2.04	3.37	4.70	-1.33	1.92	3.49	4.70	-1.21
BW-MW-1	731232.46	608659.01	5.62	2.08	3.54			1.09	4.53		
BW-PZ-2	731122.20	608785.03	5.62	2.37	3.25	4.99	-1.74	2.04	3.58	4.99	-1.41
BW-MW-2	731132.11	608792.88	5.83	2.25	3.58			1.24	4.59		
BW-PZ-3	731025.82	608790.21	5.29	2.25	3.04	5.24	-2.20	2.18	3.11	5.24	-2.13
BW-MW-3	730985.97	608838.74	10.77	7.64	3.13			7.14	3.63		
BW-PZ-4	730883.74	608700.33	5.23	2.11	3.12	5.08	-1.95	2.46	2.77	5.08	-2.30
BW-MW-4	730852.99	608741.21	10.69	7.42	3.27			7.18	3.51		
BW-PZ-5	730876.54	608596.12	4.67	1.52	3.15	3.95	-0.80	1.38	3.29	3.95	-0.66
BW-MW-5	730824.35	608557.61	12.18	8.63	3.55			8.20	3.98		
BW-PZ-6	730958.19	608486.71	4.41	1.23	3.18	3.90	-0.72	1.17	3.24	3.90	-0.66
BW-MW-6	730904.66	608479.73	8.95	5.47	3.48			5.24	3.71		
BW-PZ-7	731069.53	608451.64	4.80	1.33	3.47	3.13	0.35	1.16	3.64	3.13	0.52
BW-MW-7	731086.88	608429.05	4.89	0.37	4.52			0.00*	NA		
BW-PZ-8	731220.67	608564.35	5.11	1.62	3.49	3.71	-0.22	1.44	3.67	3.71	-0.04
BW-MW-8	731236.98	608540.79	5.02	0.83	4.19			0.40	4.62		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				11/8/2011				11/15/2011			
Monitoring Well I.D.	Northing	Easting	Survey Top of Casing Elev.[1]	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW	Measured Depth to Gw Table (FT)	Gw Elevation (FT)	Approx Top of VBW Elev.	Δ Elev. of VBW and GW
	NAD83	NAD83	NGVD1929	FTOC (0.0')	NGVD 1929	NGVD 1929	FT	FTOC (0.0')	NGVD 1929	NGVD 1929	FT
BW-PZ-1	731221.93	608651.47	5.41	2.03	3.38	4.70	-1.32	2.07	3.34	4.70	-1.36
BW-MW-1	731232.46	608659.01	5.62	1.92	3.70			2.28	3.34		
BW-PZ-2	731122.20	608785.03	5.62	2.41	3.21	4.99	-1.78	2.43	3.19	4.99	-1.80
BW-MW-2	731132.11	608792.88	5.83	2.06	3.77			2.46	3.37		
BW-PZ-3	731025.82	608790.21	5.29	2.42	2.87	5.24	-2.37	2.44	2.85	5.24	-2.39
BW-MW-3	730985.97	608838.74	10.77	7.61	3.16			7.81	2.96		
BW-PZ-4	730883.74	608700.33	5.23	2.51	2.72	5.08	-2.35	2.6	2.63	5.08	-2.44
BW-MW-4	730852.99	608741.21	10.69	7.52	3.17			7.57	3.12		
BW-PZ-5	730876.54	608596.12	4.67	1.55	3.12	3.95	-0.83	1.3	3.37	3.95	-0.58
BW-MW-5	730824.35	608557.61	12.18	8.55	3.63			8.68	3.50		
BW-PZ-6	730958.19	608486.71	4.41	1.3	3.11	3.90	-0.79	1.31	3.10	3.90	-0.80
BW-MW-6	730904.66	608479.73	8.95	5.45	3.50			5.49	3.46		
BW-PZ-7	731069.53	608451.64	4.80	1.30	3.50	3.13	0.38	1.35	3.45	3.13	0.33
BW-MW-7	731086.88	608429.05	4.89	0.26	4.63			0.40	4.49		
BW-PZ-8	731220.67	608564.35	5.11	1.58	3.53	3.71	-0.18	1.65	3.46	3.71	-0.25
BW-MW-8	731236.98	608540.79	5.02	0.71	4.31			0.93	4.09		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				11/22/2011				12/5/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	2.07	3.34	4.70	-1.36	2.02	3.39	4.70	-1.31
BW-MW-1	731232.46	608659.01	5.62	2.07	3.55			2.01	3.61		
BW-PZ-2	731122.20	608785.03	5.62	2.48	3.14	4.99	-1.85	2.55	3.07	4.99	-1.92
BW-MW-2	731132.11	608792.88	5.83	2.23	3.60			2.24	3.59		
BW-PZ-3	731025.82	608790.21	5.29	2.46	2.83	5.24	-2.41	2.21	3.08	5.24	-2.16
BW-MW-3	730985.97	608838.74	10.77	7.88	2.89			7.68	3.09		
BW-PZ-4	730883.74	608700.33	5.23	2.61	2.62	5.08	-2.45	2.15	3.08	5.08	-1.99
BW-MW-4	730852.99	608741.21	10.69	7.67	3.02			7.50	3.19		
BW-PZ-5	730876.54	608596.12	4.67	1.62	3.05	3.95	-0.90	1.46	3.21	3.95	-0.74
BW-MW-5	730824.35	608557.61	12.18	8.64	3.54			8.58	3.60		
BW-PZ-6	730958.19	608486.71	4.41	1.26	3.15	3.90	-0.75	1.25	3.16	3.90	-0.74
BW-MW-6	730904.66	608479.73	8.95	5.41	3.54			5.43	3.52		
BW-PZ-7	731069.53	608451.64	4.80	1.36	3.44	3.13	0.32	1.27	3.53	3.13	0.41
BW-MW-7	731086.88	608429.05	4.89	0.30	4.59			0.21	4.68		
BW-PZ-8	731220.67	608564.35	5.11	1.62	3.49	3.71	-0.22	1.56	3.55	3.71	-0.16
BW-MW-8	731236.98	608540.79	5.02	0.83	4.19			0.75	4.27		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 5 - Barrier Wall Groundwater Level Measurements
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

OU-1 Vertical Barrier Wall Groundwater Monitoring				12/13/2011				12/20/2011			
Monitoring Well I.D.	**Northing** NAD83	**Easting** NAD83	**Survey Top of Casing Elev.**[1] NGVD1929	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT	**Measured Depth to Gw Table (FT)** FTOC (0.0')	**Gw Elevation (FT)** NGVD 1929	**Approx Top of VBW Elev.** NGVD 1929	**Δ Elev. of VBW and GW** FT
BW-PZ-1	731221.93	608651.47	5.41	1.96	3.45	4.70	-1.25	2.03	3.38	4.70	-1.32
BW-MW-1	731232.46	608659.01	5.62	1.71	3.91			2.25	3.37		
BW-PZ-2	731122.20	608785.03	5.62	2.31	3.31	4.99	-1.68	2.25	3.37	4.99	-1.62
BW-MW-2	731132.11	608792.88	5.83	1.95	3.88			2.42	3.41		
BW-PZ-3	731025.82	608790.21	5.29	2.22	3.07	5.24	-2.17	2.02	3.27	5.24	-1.97
BW-MW-3	730985.97	608838.74	10.77	7.44	3.33			7.73	3.04		
BW-PZ-4	730883.74	608700.33	5.23	2.11	3.12	5.08	-1.95	1.85	3.38	5.08	-1.69
BW-MW-4	730852.99	608741.21	10.69	7.30	3.39			7.54	3.15		
BW-PZ-5	730876.54	608596.12	4.67	1.43	3.24	3.95	-0.71	1.42	3.25	3.95	-0.70
BW-MW-5	730824.35	608557.61	12.18	8.65	3.53			8.78	3.40		
BW-PZ-6	730958.19	608486.71	4.41	1.2	3.21	3.90	-0.69	1.2	3.21	3.90	-0.69
BW-MW-6	730904.66	608479.73	8.95	5.38	3.57			5.50	3.45		
BW-PZ-7	731069.53	608451.64	4.80	1.25	3.55	3.13	0.43	1.26	3.54	3.13	0.42
BW-MW-7	731086.88	608429.05	4.89	0.08	4.81			0.38	4.51		
BW-PZ-8	731220.67	608564.35	5.11	1.49	3.62	3.71	-0.09	1.59	3.52	3.71	-0.19
BW-MW-8	731236.98	608540.79	5.02	0.6	4.42			0.87	4.15		

[1]Top of Casing elevation was measured from the highest point of the PVC riser.

[2]Gray highlight denotes where the difference in elevation between groundwater measured inside of piezometer (inside of wall) and the top of the vertical barrier wall is less than 1 foot, or where the groundwater elevation at the well location is higher than the adjacent top of the vertical barriar wall elevation.

[3] 0.00* indicates that there was water flowing out of the top of casing.

Table 6 - Barrier Wall Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-1							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110316BW-MW-1V6.25N		20110629 BWMW-1V7N		20110909BWMW1V7N		20111206BWMW-1V6.5N	
Lab Sample No.	PQLs and		460-24264-5		460-28238-3		460-30955-5		460-34435-3	
Sampling Date	GW Quality		3/16/2011		6/29/11		9/9/2011 2:51:00 PM		12/6/2011 12:50:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	**35**		**3**		**5.2**		**2.3**	
Mercury, Dissolved	2	µg/L	**15**		0.9		1.6		0.16	U

			BW-MW-2							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110314BW-MW-2V7.0N		20110629 BWMW-2V7N		20110906BWMW2V7N		20111205BW-MW-2V7N	
Lab Sample No.	PQLs and		460-24087-5		460-28239-1		460-30707-2		460-34358-3	
Sampling Date	GW Quality		3/14/2011		6/29/11		9/6/2011 1:55:00 PM		12/5/2011 2:25:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	0.42		0.45		0.48		**4.0**	
Mercury, Dissolved	2	µg/L	0.18	U	0.19	U	NT		0.16	U

Notes:

Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

Table 6 - Barrier Wall Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-3							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110314BW-MW-3V11.0N		20110628BWMW-3V11.5N		20110906BWMW3V11.0N		20111205BW-MW-3V11.5N	
Lab Sample No.	PQLs and		460-24087-2		460-28186-1		460-30707-1		460-34358-1	
Sampling Date	GW Quality		3/14/2011		6/28/11		9/6/2011 1:00:00 PM		12/5/2011 11:05:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	0.18		0.19	U	0.19	U	0.79	
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			BW-MW-4							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		110317BW-MW-4V12.0N		20110629 BWMW-4V12N		20110907 BWMW4V12.0N		20111205BW-MW-4V12N	
Lab Sample No.	PQLs and		460-24309-4		460-28238-4		460-30741-1		460-34358-2	
Sampling Date	GW Quality		3/17/2011		6/29/11		9/7/2011 9:45:00 AM		12/5/2011 11:20:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	**19**		**4.3**		1.8		0.28	
Mercury, Dissolved	2	µg/L	0.18	U	0.21		NT		NT	

Notes:

Grey shading indicates that the concentration was detected
above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

Table 6 - Barrier Wall Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-5							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110317BW-MW-5V11.75N		20110628BWMW-5V11.75N		20110907BWMW5V11.75N		20111205BW-MW-5V12N	
Lab Sample No.	PQLs and		460-24309-5		460-28186-3		460-30741-2		460-34358-4	
Sampling Date	GW Quality		3/17/2011		6/28/11		9/7/2011 9:45:00 AM		12/5/2011 12:35:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	0.18	U	0.19	U	0.19	U	0.83	
Mercury, Dissolved	2	µg/L	NT		NT		NT		NT	

			BW-MW-6							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110317BW-MW-6V9.5N		20110628BWMW-6V10N		20110909BWMW6V9.5N		20111205BWMW-6V9.5N	
Lab Sample No.	PQLs and		460-24309-7		460-28186-4		460-30955-3		460-34358-6	
Sampling Date	GW Quality		3/17/2011		6/28/11		9/9/2011 12:06:00 PM		12/5/2011 3:15:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	0.23		0.27		0.69		0.51	
Mercury, Dissolved	2	µg/L	0.18	U	NT		NT		NT	

Notes:

Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

Table 6 - Barrier Wall Groundwater Sampling Results
OM&M 2011 Annual Report
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

			BW-MW-7							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110316BW-MW-7V7.ON		20110628BWMW-7V7N		20110906BWMW7V7.0N		20111206BWMW-7V N	
Lab Sample No.	PQLs and		460-24264-1		460-28186-5		460-30707-5		460-34435-4	
Sampling Date	GW Quality		3/16/2011		6/28/11		9/6/2011 3:50:00 PM		12/6/2011 10:50:00 AM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	0.18	U	0.19	U	0.19	U	0.32	
Mercury, Dissolved	2	µg/L	0.18	U	NT		NT		NT	

			BW-MW-8							
			Q1		Q2		Q3		Q4	
Sample ID	NJ Higher of		20110316BW-MW-8V7.0N		20110629 BWMW-8V7N		20110909BWMW8V7N		20111206BWMW-8V N	
Lab Sample No.	PQLs and		460-24264-2		460-28239-2		460-30955-4		460-34435-5	
Sampling Date	GW Quality		3/16/2011		6/29/11		9/9/2011 12:41:00 PM		12/6/2011 12:35:00 PM	
Matrix	2005 Criteria		Water		Water		Water		Water	
METALS										
Total Mercury	2	µg/L	**4.1**		**9.7**		**9.8**		**12**	
Mercury, Dissolved	2	µg/L	1.5		0.81		1.4		0.4	

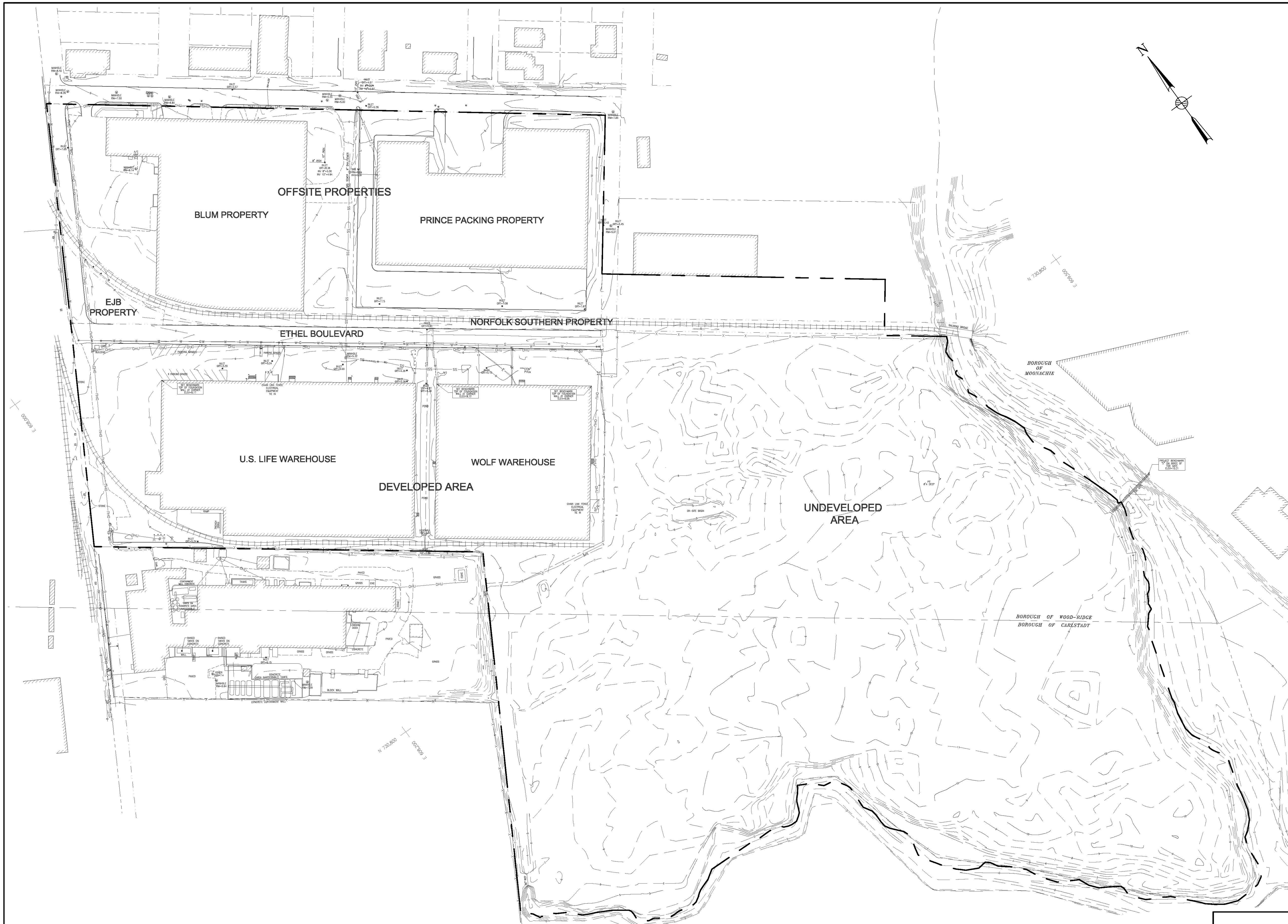
Notes:

Grey shading indicates that the concentration was detected above its NJ PQLs and GW Quality Criteria.
U - The compound was not detected
J - The concentration is an approximate value
NT - Not tested

Table 7- Vertical Barrier Wall Tank Water Disposal
Annual Report 2011
Morton International Ventron/Velsicol Operable Unit One
Wood-Ridge, NJ

Date removed	Volume removed (gallons)
Quarter 1	
3/14/2011	10,600
3/18/2011	5,154
3/24/2011	10,600
Subtotal gallons removed	26,354
Quarter 2	
5/11/2011	10,250
5/12/2011	10,250
6/9/2011	10,650
6/10/2011	9,600
6/29/2011	9,661
6/30/2011	5,000
Subtotal gallons removed	55,411
Quarter 3	
8/16/2011	9,900
8/23/2011	9,500
9/8/2011	10,000
9/9/2011	10,600
9/20/2011	10,400
9/27/2011	8,050
Subtotal gallons removed	58,450
Quarter 4	
10/4/2011	5,111
10/11/2011	5,200
11/1/2011	5,034
11/8/2011	5,350
11/15/2011	5,000
11/22/2011	4,860
12/6/2011	5,525
12/20/2011	10,195
Subtotal gallons removed	46,275
Total gallons removed	**186,490**

Figures



OM&M 2011 ANNUAL REPORT

NO.	REVISION	DWN.	CHK.	CHK.	CHK.	DATE

ROBERT C. SWABSIN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE036687

MORTON INTERNATIONAL, INC.
100 INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-2399

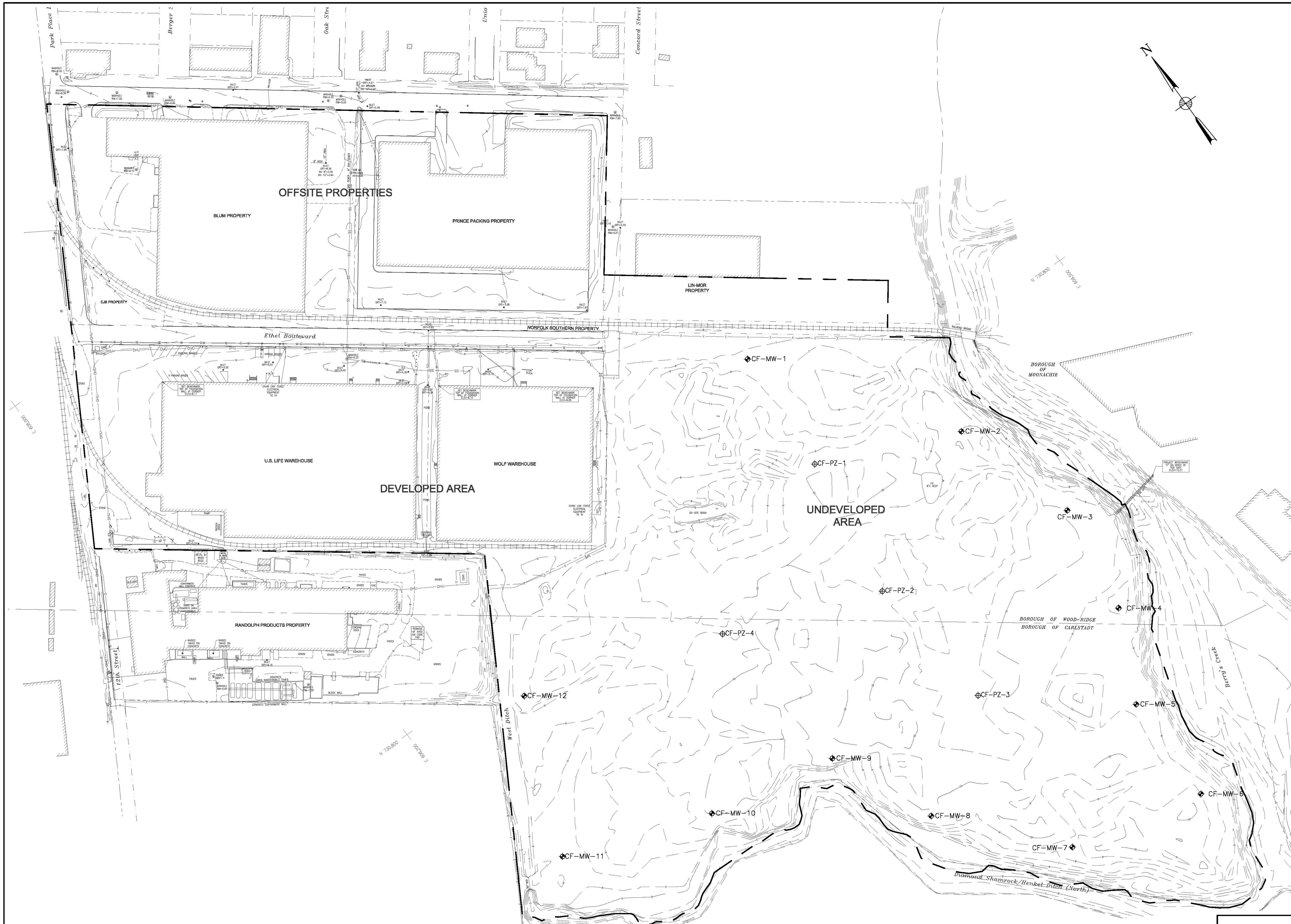
JOB NO. 445806
CONTRACTOR'S JOB NO.
SCALE AS SHOWN

VENTRON/VELSICOL SUPERFUND SITE OU-1
WOOD-RIDGE/CARLSTADT, NEW JERSEY
DEED NOTICE
PROPERTIES

PARSONS
200 COTTONTAIL LANE
SOMERSET, NJ 08873-1148

CG	SA	NJG	4/8/11
PRJT. MNGR.	DSGN. MNGR.	RESP. ENGR.	DATE

SHEET NUMBER: FIGURE 1
REV



		Flux Monitoring Sampling Program
Monitoring Wells	CF-MW-1	S
	CF-MW-2	S
	CF-MW-3	S
	CF-MW-4	S
	CF-MW-5	S
	CF-MW-6	S
	CF-MW-7	S
	CF-MW-8	S
	CF-MW-9	S
	CF-MW-10	S
	CF-MW-11	S
	CF-MW-12	S
Piezometers	CF-PZ-1	WL
	CF-PZ-2	WL
	CF-PZ-3	WL
	CF-PZ-4	WL

NOTES:

1. "S" DENOTES A WELL WHICH MUST BE SAMPLED AND WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
2. "WL" DENOTES A WELL OR PIEZOMETER WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
3. SOME SAMPLING EVENTS WILL BE PERFORMED CONCURRENTLY. IF A WELL IS SCHEDULED TO BE SAMPLED FOR BOTH EVENTS, ONLY ONE SAMPLE WILL BE TAKEN AND THE RESULTS WILL BE USED FOR BOTH EVENTS.
4. DENOTES WELL COULD NOT BE LOCATED.

OM&M 2011 ANNUAL REPORT

LEGEND:

LIMITS OF OU-1 SITE

BW-PZ-8 PIEZOMETER

CF-MW-11 MONITORING WELL

MW2 HISTORIC MONITORING WELL

80 40 0 80 160

SCALE: 1" = 80'

NO.	REVISION	DWN.	CHK.	CHK.	CHK.	DATE

ROBERT C. SWABSIN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE036687

MORTON INTERNATIONAL, INC.
100 INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-2399

JOB NO. 445806
CONTRACTOR'S JOB NO.
SCALE AS SHOWN

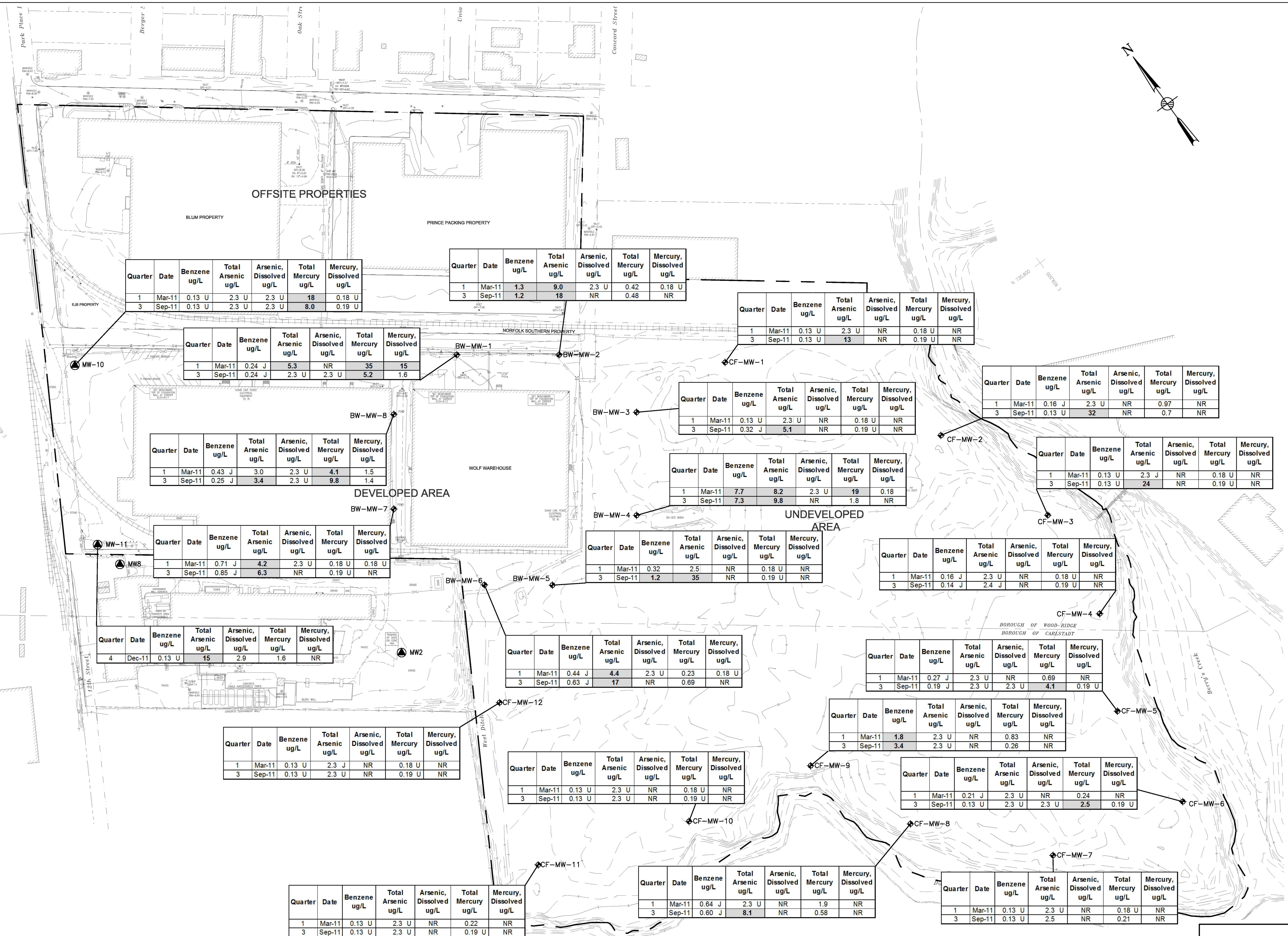
VENTRON/VELSICOL SUPERFUND SITE OU-1
WOOD-RIDGE/CARLSTADT, NEW JERSEY
CONTAMINANT FLUX MONITORING LOCATIONS

PARSONS
200 COTTONTAIL LANE
SOMERSET, NJ 08873-1148

CG	SA	NJG	4/8/11
PRJT. MNGR.	DSGN. MNGR.	RESP. ENGR.	DATE

SHEET NUMBER FIGURE 2 REV

FILE: P:\PIT\PROJECTS\ROHM & HAAS\OU-1\OM&M\QUARTERLY REPORTS\Q4 2011\FIGURES\FIGURE 2-A.DWG, DATE: 01/12/2012 08:25:06AM, p001489A



MW-10

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	2.3 U	18	0.18 U
3	Sep-11	0.13 U	2.3 U	2.3 U	8.0	0.19 U

BW-MW-2

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	1.3	9.0	2.3 U	0.42	0.18 U
3	Sep-11	1.2	18	NR	0.48	NR

BW-MW-1

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.24 J	5.3	NR	35	15
3	Sep-11	0.24 J	2.3 U	2.3 U	5.2	1.6

CF-MW-1

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	NR	0.18 U	NR
3	Sep-11	0.13 U	13	NR	0.19 U	NR

BW-MW-3

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	NR	0.18 U	NR
3	Sep-11	0.32 J	5.1	NR	0.19 U	NR

CF-MW-2

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.16 J	2.3 U	NR	0.97	NR
3	Sep-11	0.13 U	32	NR	0.7	NR

BW-MW-8

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.43 J	3.0	2.3 U	4.1	1.5
3	Sep-11	0.25 J	3.4	2.3 U	9.8	1.4

BW-MW-4

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	7.7	8.2	2.3 U	19	0.18
3	Sep-11	7.3	9.8	NR	1.8	NR

CF-MW-3

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 J	NR	0.18 U	NR
3	Sep-11	0.13 U	24	NR	0.19 U	NR

BW-MW-7

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.71 J	4.2	2.3 U	0.18 U	0.18 U
3	Sep-11	0.85 J	6.3	NR	0.19 U	NR

BW-MW-5

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.32	2.5	NR	0.18 U	NR
3	Sep-11	1.2	35	NR	0.19 U	NR

CF-MW-4

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.16 J	2.3 U	NR	0.18 U	NR
3	Sep-11	0.14 J	2.4 J	NR	0.19 U	NR

MW-11

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
4	Dec-11	0.13 U	15	2.9	1.6	NR

BW-MW-6

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.44 J	4.4	2.3 U	0.23	0.18 U
3	Sep-11	0.63 J	17	NR	0.69	NR

CF-MW-5

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.27 J	2.3 U	NR	0.69	NR
3	Sep-11	0.19 J	2.3 U	2.3 U	4.1	0.19 U

CF-MW-9

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	1.8	2.3 U	NR	0.83	NR
3	Sep-11	3.4	2.3 U	NR	0.26	NR

CF-MW-12

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 J	NR	0.18 U	NR
3	Sep-11	0.13 U	2.3 U	NR	0.19 U	NR

CF-MW-10

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	NR	0.18 U	NR
3	Sep-11	0.13 U	2.3 U	NR	0.19 U	NR

CF-MW-6

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.21 J	2.3 U	NR	0.24	NR
3	Sep-11	0.13 U	2.3 U	2.3 U	2.5	0.19 U

CF-MW-8

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.64 J	2.3 U	NR	1.9	NR
3	Sep-11	0.60 J	8.1	NR	0.58	NR

CF-MW-7

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	NR	0.18 U	NR
3	Sep-11	0.13 U	2.5	NR	0.21	NR

CF-MW-11

Quarter	Date	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.13 U	2.3 U	NR	0.22	NR
3	Sep-11	0.13 U	2.3 U	NR	0.19 U	NR

		CEA Sampling Program
Monitoring Wells	CF-MW-1	S
	CF-MW-2	S
	CF-MW-3	S
	CF-MW-4	S
	CF-MW-5	S
	CF-MW-6	S
	CF-MW-7	S
	CF-MW-8	S
	CF-MW-9	S
	CF-MW-10	S
	CF-MW-11	S
	CF-MW-12	S
	BW-MW-1	S
	BW-MW-2	S
	BW-MW-3	S
	BW-MW-4	S
	BW-MW-5	S
	BW-MW-6	S
	BW-MW-7	S
	BW-MW-8	S
	MW-10	S
	MW-11	S(4)
	MW2	S(5)
	MW8	S(6)

TABLE REFERENCE GUIDE

Limit	Benzene ug/L	Total Arsenic ug/L	Arsenic, Dissolved ug/L	Total Mercury ug/L	Mercury, Dissolved ug/L
NJ Higher of PQLs and GW Quality 2005 Criteria	1	3	3	2	2

NOTES:

1. "S" DENOTES A WELL WHICH MUST BE SAMPLED AND WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
2. "WL" DENOTES A WELL OR PIEZOMETER WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
3. SOME SAMPLING EVENTS WILL BE PERFORMED CONCURRENTLY. IF A WELL IS SCHEDULED TO BE SAMPLED FOR BOTH EVENTS, ONLY ONE SAMPLE WILL BE TAKEN AND THE RESULTS WILL BE USED FOR BOTH EVENTS.
4. DENOTES WELL COULD NOT BE LOCATED UNTIL QUARTER 4.
5. DENOTES WELL WAS DAMAGED.
6. DENOTES WELL COULD NOT BE LOCATED.
7. GREY SHADING DENOTES THAT THE CONCENTRATION WAS DETECTED ABOVE ITS NJ GW QUALITY CRITERIA.
8. U–THE COMPOUND WAS NOT DETECTED.
9. J–THE CONCENTRATION IS AN APPROXIMATE VALUE.
10. NR–SAMPLE WAS NOT RUN FOR THIS ANALYSIS.

LEGEND:

— — —	LIMITS OF OU-1 SITE
CF-MW-11	MONITORING WELL
MW2	HISTORIC MONITORING WELL

OM&M 2011 ANNUAL REPORT

NO.	REVISION	DWN.	CHK.	CHK.	CHK.	DATE

ROBERT C. SWABSIN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE036687

MORTON INTERNATIONAL, INC.
100 INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-2399

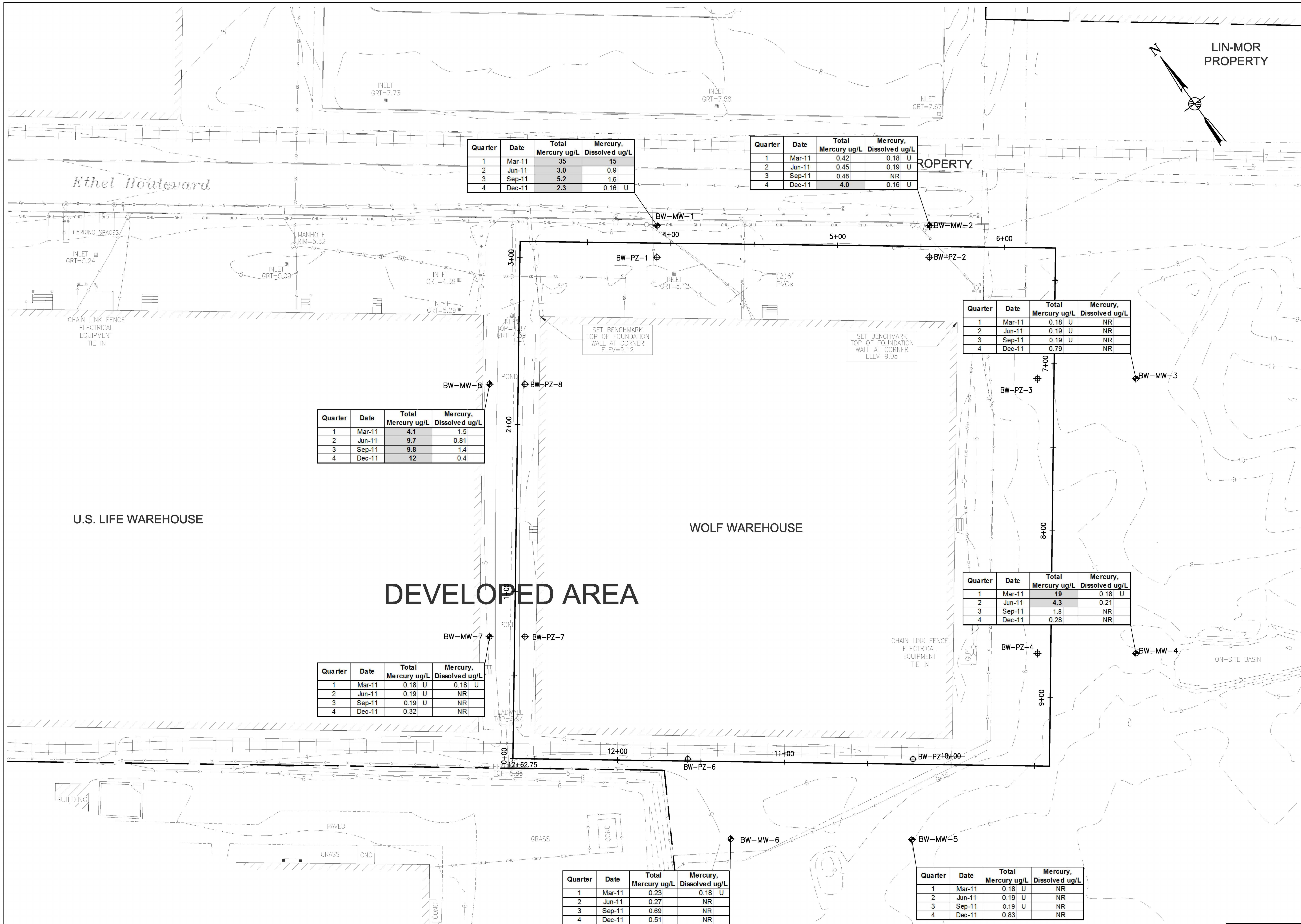
JOB NO. 445806
CONTRACTOR'S JOB NO.
SCALE AS SHOWN

VENTRON/VELSICOL SUPERFUND SITE OU-1
WOOD-RIDGE/CARLSTADT, NEW JERSEY
CLASSIFICATION EXCEPTION AREA MONITORING LOCATIONS AND RESULTS

PARSONS
200 COTTONTAIL LANE
SOMERSET, NJ 08873-1148

CG	SA	NJG	4/8/11
PRJT. MNGR.	DSGN. MNGR.	RESP. ENGR.	DATE

SHEET NUMBER
FIGURE 3
REV



BW-MW-1

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	35	15
2	Jun-11	3.0	0.9
3	Sep-11	5.2	1.6
4	Dec-11	2.3	0.16 U

BW-MW-2

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.42	0.18 U
2	Jun-11	0.45	0.19 U
3	Sep-11	0.48	NR
4	Dec-11	4.0	0.16 U

BW-MW-3

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.18 U	NR
2	Jun-11	0.19 U	NR
3	Sep-11	0.19 U	NR
4	Dec-11	0.79	NR

BW-MW-8

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	4.1	1.5
2	Jun-11	9.7	0.81
3	Sep-11	9.8	1.4
4	Dec-11	12	0.4

BW-MW-4

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	19	0.18 U
2	Jun-11	4.3	0.21
3	Sep-11	1.8	NR
4	Dec-11	0.28	NR

BW-MW-7

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.18 U	0.18 U
2	Jun-11	0.19 U	NR
3	Sep-11	0.19 U	NR
4	Dec-11	0.32	NR

BW-MW-6

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.23	0.18 U
2	Jun-11	0.27	NR
3	Sep-11	0.69	NR
4	Dec-11	0.51	NR

BW-MW-5

Quarter	Date	Total Mercury ug/L	Mercury, Dissolved ug/L
1	Mar-11	0.18 U	NR
2	Jun-11	0.19 U	NR
3	Sep-11	0.19 U	NR
4	Dec-11	0.83	NR

		Vertical Barrier Wall Effectiveness Sampling Program
Monitoring Wells	BW-MW-1	S
	BW-MW-2	S
	BW-MW-3	S
	BW-MW-4	S
	BW-MW-5	S
	BW-MW-6	S
	BW-MW-7	S
	BW-MW-8	S
Piezometers	BW-PZ-1	WL
	BW-PZ-2	WL
	BW-PZ-3	WL
	BW-PZ-4	WL
	BW-PZ-5	WL
	BW-PZ-6	WL
	BW-PZ-7	WL
	BW-PZ-8	WL

TABLE REFERENCE GUIDE

Limit	Total Mercury ug/L	Mercury, Dissolved ug/L
NJ Higher of PQLs and GW Quality 2005 Criteria	2	2

NOTES:

1. "S" DENOTES A WELL WHICH MUST BE SAMPLED AND WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
2. "WL" DENOTES A WELL OR PIEZOMETER WHERE THE WATER LEVEL MUST BE MEASURED DURING THE GIVEN EVENT.
3. SOME SAMPLING EVENTS WILL BE PERFORMED CONCURRENTLY. IF A WELL IS SCHEDULED TO BE SAMPLED FOR BOTH EVENTS, ONLY ONE SAMPLE WILL BE TAKEN AND THE RESULTS WILL BE USED FOR BOTH EVENTS.
4. U–THE COMPOUND WAS NOT DETECTED.
5. NR–SAMPLE WAS NOT RUN FOR THIS ANALYSIS.
6. GREY SHADING DENOTES THAT THE CONCENTRATION WAS DETECTED ABOVE ITS NJ GW QUALITY CRITERIA.

OM&M 2011 ANNUAL REPORT

LEGEND:

2+00	VERTICAL BARRIER WALL ALIGNMENT
— — —	LIMITS OF OU-1 SITE
BW-PZ-8	PIEZOMETER
CF-MW-11	MONITORING WELL
MW2	HISTORIC MONITORING WELL

30 15 0 30 60

SCALE: 1" = 30'

NO.	REVISION	DWN.	CHK.	CHK.	CHK.	DATE

ROBERT C. SWABSIN, P.E.
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE036687

MORTON INTERNATIONAL, INC.
100 INDEPENDENCE MALL WEST
PHILADELPHIA, PA 19106-2399

JOB NO. 445806
CONTRACTOR'S JOB NO.
SCALE AS SHOWN

VENTRON/VELSICOL SUPERFUND SITE OU-1
WOOD-RIDGE/CARLSTADT, NEW JERSEY
VERTICAL BARRIER WALL EFFECTIVENESS MONITORING AND SAMPLING PLAN

PARSONS
200 COTTONTAIL LANE
SOMERSET, NJ 08873-1148

CG	SA	NJG	4/08/11
PRJT. MNGR.	DSGN. MNGR.	RESP. ENGR.	DATE

SHEET NUMBER: FIGURE 4
REV

Appendices

Appendix A – Deed Notice Inspection Forms

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE. MAR. 15, 2011

Weather: M. SUNNY, 40°F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: WOLF WAREHOUSE

Current operator at the site (if different than above): PRESIDENT CONTAINER

Property Street Address: 3 ETHEL BLVD

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

WAREHOUSE / DISTRIBUTION ONE STORY FACILITY WITH OFFICE AREA ON PARTIAL SECOND FLOOR SURROUNDED BY NEW CONCRETE PAVING PARKING / ACCESS AREAS SOUTH OF ETHEL BLVD SITE CONTAINS VERTICLE BARRIER WALL UNDER CONCRETE CAP

Describe the current site operations.

WAREHOUSE / DISTRIBUTION OF PAPER PACKING PRODUCTS

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

WOLF WAREHOUSE

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

CONCRETE SURFACE PAVING IN EXCELLENT CONDITION. SOME MINOR CRACKING IN CONCRETE, NO GAPS AT CRACKS PROPER DRAINAGE OF STORM WATER

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE, MAR 15, 2011

Weather: M. SUNNY 40°F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: U.S. LIFE WAREHOUSE

Current operator at the site (if different than above): REDI-RAW

Property Street Address: 1 ETHEL BLVD.

Municipality (-ies): WOOD RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

WAREHOUSE / DISTRIBUTION ONE STORY FACILITY WITH OFFICE AREA ON PARTIAL 2ND FLOOR SOURROUNDED BY ASPHALT PARKING/ACCESS AREAS AT SOUTH-EAST CORNER OF PARK PLACE EAST & ETHEL BLVD

Describe the current site operations.

WAREHOUSE AND DISTRIBUTION OF FOOD STUFFS HEAVY TRUCK TRAFFIC

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

US LIFE WAREHOUSE

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

MINOR POT HOLES IN PARKING AREA
NO SOIL DISTURBANCE

III. Attachments

A. Photos Description:	Yes: ☐	No: ☒
B. Sketches: Description:	Yes: ☐	No: ☒
C. Supplemental Inspection Notes/Forms: Description: (Parsons OM&M Form)	Yes: ☐	No: ☒

[signature]
Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE. MAR 15, 2011

Weather: M. SUNNY 40°F

OU 1 UNDEVELOPED AREA

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: ______

Current operator at the site (if different than above): ______

Property Street Address: 5 ETHEL BLVD

Municipality (-ies): WOOD-RIDGE / CARLSTADT, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

APPROX 17 ACRES OPEN LAND AREA CROWNED WITH GENTLE SLOPING ENGINEERED EARTHEN CAP. BORDERED TO NORTH BY N-S RAILROAD SPUR, TO EAST BY BERRY'S CREEK, TO SOUTH BY MEHKLE DITCH NORTH, TO WEST BY DIAMOND [illegible], MEHKLE PROPERTY, RANDOLPH PROPERTY, AND WOLF WAREHOUSE. ACCESS AT END OF ETHEL BLVD.

Describe the current site operations.

OPEN SPACE / NONE

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

OU1 UNDEVELOPED AREA

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

MINOR SOIL EROSION ON UNVEGITATED CAP
SEE SOIL EROSION & SEDIMENTATION CONTROL
INSPECTION FORM

III. Attachments

A. Photos Yes: [X] No: [ ] SEE O&M FORM
Description:

B. Sketches: Yes: [ ] No: [X]
Description:

C. Supplemental Inspection Notes/Forms: Yes: [X] No: [ ]
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE, MARCH 15, 2011

Weather: M. SUNNY 40° F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: PRINCE PACKING PROPERTY

Current operator at the site (if different than above):

Property Street Address: 100 BLUM

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

WAREHOUSE/DISTRIBUTION/LIGHT INDUSTRIAL ONE STORY FACILITY SURROUNDED WITH ASPHALT PAVING/ACCESS. NORTH OF N-S RAIL SPUR ON BLUM

Describe the current site operations.

WAREHOUSE / LIGHT INDUSTRIAL WITH PARKING

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

PRINCE PACKING

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

MINOR POT HOLES IN ASPHALT PAVING

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUESDAY, MARCH 15, 2011

Weather: M. SUNNY 40°F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: BLUM PROPERTY

Current operator at the site (if different than above):

Property Street Address: 50 BLUM

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

WAREHOUSE / DISTRIBUTION / LIGHT INDUSTRIAL ONE STORY FACILITY WITH ASPHALT PARKING/ACCESS AREA NORTH OF N-S RAIL SPUR AT SOUTH-EAST CORNER OF PARK PLACE EAST : BLUM

Describe the current site operations.

WAREHOUSE / LIGHT INDUSTRIAL WITH PARKING

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

BLUM PROPERTY

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

BUILDING, PARKING · PAVED AREAS
IN ACCEPTABLE CONDITION

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUESDAY, MARCH 15, 2011

Weather: M. SUNNY 40°F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: EJB PROPERTY

Current operator at the site (if different than above):

Property Street Address:

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

PAVED LEVEL SURFACE AT NORTH-EAST CORNER OF PARK PLACE EAST & ETHEL BOULEVARD

Describe the current site operations.

PARKING

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

E,I,B PROPERTY

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

ASPHALT PAVING PARKING SURFACE
IN ACCEPTABLE CONDITION

III. Attachments

A. Photos	Yes: ☐	No: ☒
Description:		
B. Sketches:	Yes: ☐	No: ☒
Description:		
C. Supplemental Inspection Notes/Forms:	Yes: ☐	No: ☒
Description: (Parsons OM&M Form)		

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE. MAR. 15, 2011

Weather: M. SUNNY 40°F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: ETHEL BOULEVARD

Current operator at the site (if different than above): ____________

Property Street Address: TOWNSHIP OF WOOD-RIDGE

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

TWO LANE ASPHALT STREET WITH CONCRETE CURBS

Describe the current site operations.

CAR AND TRUCK TRAFFIC

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☒

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

ETHEL BLVD

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

NEW PAVING AT EAST END OF ETHEL BLVD IN EXCELLENT CONDITION
OLD PAVING SHOWS SOME POTHOLES, CRACKING IN FRONT OF US LIFE WAREHOUSE (REDI-PAW) TRUCK BAYS. NO SOIL DISTURBANCE

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE. MARCH 15, 2011

Weather: M. SUNNY 90° F

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: NORFOLK SOUTHERN PROPERTY

Current operator at the site (if different than above): ________

Property Street Address: ________

Municipality (-ies): WOOD-RIDGE, NJ

County (-ies): BERGEN

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

RAILROAD SPUR NORTH OF ETHEL BOULEVARD

Describe the current site operations.

ACTIVE RAILSPUR

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

NORFOLK SOUTHERN

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

RAIL ROAD BALAST IN GOOD CONDITION

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: Simonte

Organization: Parsons

Date: 6/30/11

Weather: Sunny 80's

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Wolf Warehouse Property

Current operator at the site (if different than above):

Property Street Address: 3 Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Concrete Surface, Warehouse, RR Spur

Describe the current site operations.

Warehouse is not Active. Contractor on site Repairing Caulking on Exterior walls

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: property current condition photos

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 6/30/11

Weather: Sunny 80's

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: U.S. Life Warehouse Property

Current operator at the site (if different than above): Randy Raw

Property Street Address: 1 Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Large warehouse on site, Rail Road ~~siding~~ spur, parking
Tractor Trailers and Delivery vehicles enter and Exit property
Train cars Enter on R.R. Spur, Surface Area Asphalt
Cold Storage warehouse for Food items

Describe the current site operations.

Surface Area Asphalt, warehouse on property, Rail Road Spur

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☑ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☒ No: ☐

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

SURFACE DRAIN REPAIRS ON NORTH SIDE OF WAREHOUSE. photos taken. Sump pump discharge line from U.S. Life property to Wolf property (see photos)

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: photos of All 4 property Sides and surface drain Repair Areas

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 6/30/11

Weather: Sunny 80's

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Undeveloped Area Property

Current operator at the site (if different than above):

Property Street Address: 5 Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Undeveloped property. No structures, Silt Fence borders property boundary. vegetation growing onsite grass/soil. small area concrete. gravel Road on property

Describe the current site operations.

NO Activities. property VACANT

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

May 2011 Soil grading For Hydroseed Application

III. Attachments

A. Photos Yes: ☐ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☐
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 6/30/11

Weather: Sunny 80°s

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Prince Packing Property

Current operator at the site (if different than above): Winston Corrugated Box Co

Property Street Address: 100 Blum Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

Winston Corrugated Box Co

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Large building/warehouse. Asphalt and grass. Asphalt use for ~~property~~ parking and Driveways.

Describe the current site operations.

Site active, shipping and receiving of products/supplies, office space

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: [X] No: [ ]
Description: current conditions

B. Sketches: Yes: [ ] No: [X]
Description:

C. Supplemental Inspection Notes/Forms: Yes: [ ] No: [ ]
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte
Organization: PARSONS
Date: 6/30/11
Weather: Sunny 80^s

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Blum Property
Current operator at the site (if different than above): Julius Blum
Property Street Address: 50 Blum Blvd
Municipality (-ies): Wood-Ridge
County (-ies):

Julius Blum

B. Existing Site Conditions:
Describe the physical characteristics of the Site.
Warehouse building, brick. Surrounding property grass/asphalt
Asphalt Areas used For Driveways and parking

Describe the current site operations.
Site Appears Active, NO soil Disturbances,
Shipping And Receiving OF products/supplies, OFFice space

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:
Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):
Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:
Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: Current Site conditions

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 6/30/11

Weather: Sunny 80's

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: EJB Property

Current operator at the site (if different than above): —

Property Street Address: 1 Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt covered area. Surface conditions ~~[illegible]~~ appear to be in good condition. Some puddling.

Describe the current site operations.

Used as a parking lot

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☐ Residential: ☒ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☐ Residential: ☒ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: Current conditions

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 6/30/11

Weather: Sunny 80°s

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Ethel Blvd

Current operator at the site (if different than above): City of Wood-Ridge

Property Street Address: Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt Road

Describe the current site operations.

Active Road use

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: photos of current Road condition

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 6/30/11

Weather: Sunny 80's

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Norfolk Southern RailRoad

Current operator at the site (if different than above): —

Property Street Address: Park Place E to Moonachie Borough line

Municipality (-ies): Wood-Ridge

County (-ies):

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

RailRoad tracks, Timbers supporting track and small stone. Large amount of Debris (tree limbs, garbage) Adjacent to tracks.

Describe the current site operations.

Active RailRoad Spur

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

NA

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: photos of current track conditions

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Wolf Warehouse

Current operator at the site (if different than above):

Property Street Address: 3 Ethel Blvd JK 10/26

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Concrete Surface. Warehouse (concrete panel) that has Doors to Accept trailers and Train deliveries. Flat roof drains to South side of building.

Describe the current site operations.

Site has become Active in recent weeks. Multiple trailers onsite being loaded and unloaded. No construction Activities.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):
Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

EWOLF

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

NO Disturbances to PZ or MW on property.

III. Attachments

A. Photos Description:	Yes: ☒	No: ☐
B. Sketches: Description:	Yes: ☐	No: ☐
C. Supplemental Inspection Notes/Forms: Description: (Parsons OM&M Form)	Yes: ☐	No: ☐

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: U.S. Life warehouse (Ready Pac)

Current operator at the site (if different than above): Ready Pac

Property Street Address: 1 Ethel Blvd JK 10/26

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt/concrete paved. Concrete warehouse with truck and train loading docks.

Describe the current site operations.

Active distributors of food via truck. Warehouse has large refridgeration and freezer systems

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

Current land use (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: [ ] No: [X]

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:

For environmental control inspection notes see Parsons OM&M Inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

NO Disturbances observed

III. Attachments

A. Photos Yes: [X] No: [ ]
Description:

B. Sketches: Yes: [ ] No: [X]
Description:

C. Supplemental Inspection Notes/Forms: Yes: [X] No: [ ]
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Undeveloped

Current operator at the site (if different than above):

Property Street Address: 5 Ethel Blvd

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Site is vacant, only vegetation on site for soil stabilization purposes.

Describe the current site operations.

No Activity at site.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Site under Final stages of rehabilitation to meet SWPPP Requirements.

Party (-ies) responsible for the disturbance:

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

Topsoil and reseeding activities will take place the week of 9/27 to comply with SWPPP as stated in section (B) above.

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 9/20/11

Weather: RAIN

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Prince Packaging.

Current operator at the site (if different than above):

Property Street Address: Blum

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

warehouse. grass / asphalt / concrete surface coverage

Describe the current site operations.

Office space and warehouse space.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

Current land use (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: [ ] No: [X] *

* Surface disturbance near office potential for drainage.

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

See "B" on page 1

Party (-ies) responsible for the disturbance:

Site operators

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Blum

Current operator at the site (if different than above): Blum

Property Street Address: 50 Blum Ave

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Grass / Asphalt surface coverage. Brick building with warehouse space

Describe the current site operations.

Distribution center

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:

For environmental control inspection notes see Parsons OM&M Inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

NA

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: EJB

Current operator at the site (if different than above): Ready Raw Parking

Property Street Address: 1 ~~Ethel~~ Blvd JK 10/26

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt parking Lot

Describe the current site operations.

used As parking area For Ready Raw.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Description:	Yes: ☒	No: ☐
B. Sketches: Description:	Yes: ☐	No: ☒
C. Supplemental Inspection Notes/Forms: Description: (Parsons OM&M Form)	Yes: ☒	No: ☐

Signature of Inspector

Inspector: S. Monte

Organization: PARSONS

Date: 9/20/11

Weather: RAIN

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Ethel Blvd

Current operator at the site (if different than above): Public Road

Property Street Address: Ethel Blvd JK 10/26

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt paved. Some potholes And depressions

Describe the current site operations.

Access Road to U.S. Life and Wolf properties, As well As undeveloped property.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

Current land use (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: [ ] No: [X]

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Description:	Yes: ☒	No: ☐
B. Sketches: Description:	Yes: ☐	No: ☐
C. Supplemental Inspection Notes/Forms: Description: (Parsons OM&M Form)	Yes: ☐	No: ☐

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monk

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Norfolk Southern

Current operator at the site (if different than above): Norfolk Southern

Property Street Address: Park Plaza to Moonachie Borough JK 10/26

Municipality (-ies): Wood Ridge JK 10/26

County (-ies): Bergen JK 10/26

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Rail Road spur line. RR line ~~on~~ lies on Stone with little vegetation on spur.

Describe the current site operations.

Surface debris (Trash) on spur line.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:

For environmental control inspection notes see Parsons OM&M Inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may effect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny Clear

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Wolf Warehouse

Current operator at the site (if different than above):

Property Street Address: Ethel Blvd

Municipality (-ies): Wood-Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Warehouse, railroad spur and concrete slab.

Describe the current site operations.

Warehouse space for multiple companies. Active with light to moderate trucking. No rail traffic witnessed

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

12/02/11 Wolf

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

NA

Party (-ies) responsible for the disturbance:

NA

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

No Disturbances witnessed on site.

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

____
Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S, Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: US. Life (Ready Raw)

Current operator at the site (if different than above): Ready Raw

Property Street Address: Ethel Blvd

Municipality (-ies): Wood Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

warehouse, asphalt parking area, concrete, Rail spur

Describe the current site operations.

Warehouse for cold food storage. Medium to heavy trucking. Low to moderate rail use.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒ *

US. Life 12/2/11

B. Excavations and Disturbances (cont.):

*If yes answered above:
Description of the disturbance and methods to address the disturbance:

work was recently conducted on rail spur. "Track was raised" according to Ready Raw manager. unknown if soil exposure was an issue.

Party (-ies) responsible for the disturbance:

Ready Raw

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

no impact to wells or cap.

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Undeveloped Property

Current operator at the site (if different than above): N/A

Property Street Address: 5 Ethel Blvd

Municipality (-ies): Wood Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Vacant property

Describe the current site operations.

None. No site buildings

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

Current land use (check all that apply):

Non-Residential: [X] Residential: [ ] Agricultural: [ ] Other: [ ]

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: [ ] No: [X]

Undeveloped Property
12/2/11

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

Site was repaired in area that lacked vegetation. And showed signs of surface erosion. Top soil/Seed/Hay/Erosion mat used.

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

Same as above

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Prince Packaging

Current operator at the site (if different than above): Prince Packaging

Property Street Address: Blum

Municipality (-ies): Wood Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

grass, Asphalt, warehouse.

Describe the current site operations.

Office and warehouse space.

Light trucking

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

Prince Packaging 12/2/11

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

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Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: PARSONS

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Blum

Current operator at the site (if different than above): Blum

Property Street Address: 50 Blum Ave

Municipality (-ies): Woodridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt Parking, grass, Brick warehouse Building.

Describe the current site operations.

Distribution center, Office space

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

Blum 12/2/11

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: EJB

Current operator at the site (if different than above): Ready Raw

Property Street Address: Ethel Blvd & Park PLE

Municipality (-ies): Wood-Ridge

County (-ies): Berger

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt area at the intersection of Ethel Blvd & Park PL.

Describe the current site operations.

Parking area for Ready Raw Employees

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

EJB 12/2/11

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

Signature of Inspector

12/2/11

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny Clear

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Ethel Blvd

Current operator at the site (if different than above): public street

Property Street Address:

Municipality (-ies): Wood Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Asphalt public Road.

Describe the current site operations.

Public Road

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

Ethel Blvd
12/2/11

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

~~NA~~ N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:

For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☐ No: ☒
Description: (Parsons OM&M Form)

[signature]
Signature of Inspector

Appendix B - Quarterly Deed Notice Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
N.J.D.E.P Interest Number: NJD980529879

Inspector: S. Monte

Organization: Parsons

Date: 12/2/11

Weather: Sunny

I. Background Site Information

A. Facility Name and Location:

Business Name as it appears on the Deed Notice: Norfolk Southern

Current operator at the site (if different than above): Norfolk Southern

Property Street Address: Ethel Blvd

Municipality (-ies): Wood Ridge

County (-ies): Bergen

B. Existing Site Conditions:

Describe the physical characteristics of the Site.

Rail spur, track, slight vegetation.

Describe the current site operations.

Active Rail spur, surface debris (trash) on or around track. No active work ongoing on track.

II. Evaluation of Institutional and Engineering Controls:

A. Zoning or Land Use Changes:

Land use at the time the Deed Notice/DER was filed (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

Current land use (check all that apply):

Non-Residential: ☒ Residential: ☐ Agricultural: ☐ Other: ☐

B. Excavations and Disturbances:

Has any excavation or other disturbance activity taken place within the restricted area which has resulted in unacceptable exposure to soil or ground water contamination?

Yes: ☐ No: ☒

12/2/11 Norfolk

B. Excavations and Disturbances (cont.):

If yes answered above:
Description of the disturbance and methods to address the disturbance:

N/A

Party (-ies) responsible for the disturbance:

N/A

C. Remarks:
For environmental control inspection notes see Parsons OM&M inspection form (attachments). Provide notes regarding disturbances to other institutional controls (i.e. groundwater monitoring wells) or other significant observations which may affect the integrity of the Deed Notice here:

N/A

III. Attachments

A. Photos Yes: [X] No: [ ]
Description:

B. Sketches: Yes: [ ] No: [X]
Description:

C. Supplemental Inspection Notes/Forms: Yes: [ ] No: [X]
Description: (Parsons OM&M Form)

Signature of Inspector

Appendix B – Data Usability Report

Appendix B
Data Usability Report / Quality Assurance Review : Quarter 1 Groundwater Sampling
January 1, 2011 through March 31, 2011

1.0 Introduction

This report documents the data usability report, quality assurance review, and data validation results of samples collected as part of the Ventron/Velsicol Superfund Site OU-1 (OU-1) at the Rohm & Hass in Wood-Ridge and Carlstadt, New Jersey (the Site). The sampling event was conducted and is being reported in accordance with the Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E, Subchapter 4) (NJDEP, 2009). A summary of the number of samples is presented in the *Sample Sets* (Section 3).

The data usability report, quality assurance review, and data validation were conducted to verify that all project quality control requirements were met, and that the quality of the data is sufficient to support its intended purpose. Data validation and assignment of validation qualifiers was according to:

- U.S. Environmental Protection Agency's (USEPA's) Region 2 Standard Operating Procedure (SOP) HW-24 "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B" (USEPA 2006).
- USEPA's Region 2 SOP HW-35 "Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2" (USEPA 2007).
- USEPA's Region 2 SOP HW-36 "Statement of Work for Organic Analysis of Low/Medium Concentration of Pesticide Organic Compounds SOM01.2" (USEPA 2007)
- USEPA's Region 2 SOP HW-37 "Statement of Work for Organic Analysis of Low/Medium Concentration of Aroclor Organic Compounds SOM01.2" (USEPA 2007)
- USEPA's Region 2 SOP HW-2 "Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3 (SOP Revision 13)" (USEPA 2006).

The results of the quality assurance review are presented herein and summarized in **Tables A** through **K**.

2.0 Data Validation Procedures

The data validation and quality assurance review included performance of a completeness audit and a review of the following parameters, where applicable: holding times, sample preservations, percentage of solids, quality control (QC) results of calibration, equipment blanks, preparation blanks, matrix spike analyses, laboratory control sample performances, laboratory and field duplicates, reporting limits, and linear range. In performing the data validation, the raw data were spot-checked in accordance with the USEPA Region 2 and NJDEP SOP to evaluate whether there were any transcription errors. Data qualifiers were assigned during the quality assurance review when applicable control limits were not met, in accordance with USEPA Region 2 and/or NJDEP SOPs.

The following laboratory deliverables were reviewed during the data validation process:

- Chain-of-custody documentation to verify completeness of the data
- Case narratives discussing analytical problems (if any) and procedures
- Samples preparation logs or laboratory summary results forms to verify analytical holding times
- Results for initial calibration and continuing calibration verification to assess instrument performance
- Results for initial calibration blanks, continuing calibration blanks, and preparation blanks to check for laboratory contamination
- Results from matrix spikes analysis and laboratory control samples (LCS) to evaluate analytical accuracy
- Results for applicable duplicate matrix spikes and laboratory duplicate results to check analytical precision
- Method detection limits (MDLs) to verify that reporting limit (RL) requirements were met.

Results of these QA/QC procedures and data qualifiers applied during validation are discussed under the *Data Quality Assessment* section below. In addition, results for all applicable field quality control samples were reviewed. These results listed below provide additional information in support of the data usability report and quality assurance review.

- Field duplicate results comparison to evaluate sampling overall precision
- Equipment blank results to evaluate potential field contamination

3.0 Sample Sets

Sample analysis was conducted by TestAmerica, Inc. for all groundwater samples. **Table A** summarizes number of samples and duplicates collected.

3.1 Analytical Methods

Table A summarizes the analysis methods performed on each sample.

3.2 Sample Delivery Groups

Two of the five sample delivery groups (SDGs) were validated as part of the Quarterly Report 1. The data packages contained all documentation and data necessary to conduct the data usability report, quality assurance review, and data validation. The other three SDGs were not validated, but their Case Narratives were reviewed for any performance issues the laboratory reported.

3.3 Data Acceptability Report

The Data Acceptability Report (DAR) was conducted to monitor laboratory performance with respect to contract issues and methods requirements. The project requirements were that 50% of the collected data shall be validated according to NJDEP and USEPA Region 2 SOPs. A total of 22 samples and two field duplicates were analyzed with 7 of them selected for laboratory filtration and analysis. Two SDGs (J24264 and J24309) were selected for validated due to having >50% of the samples, presence of a field duplicate, and two sets of matrix spike pairs. The SDGs contained a total of 12 samples, two equipment blanks (EBs), two trip blanks (TBs), and a field duplicate.
The USEPA Region 2 criteria are summarized in **Table B**.

The remaining SDGs (J24087, J24182, and J24347) case narratives were reviewed for any notable non-compliance issues reported by the laboratory. No gross data quality noncompliance issues were reported by the laboratory.

4.0 Data Quality Assessment

The SDGs that were validated are discussed below. The laboratory data were evaluated in terms of completeness, holding times, preparation blanks, quantitative limits, CRDL check, accuracy, precision, and field quality control samples.

4.1 Completeness

The results reported by the laboratory were 99-percent usable; 17 sample results were rejected out of 4431 samples result data points.

- 1,4-Dioxane non-detect results were rejected in both SDGs due to initial and continuing calibration RRF < 0.05 in the VOC 8260B analysis.
- 1,4-Dioxane non-detect results were rejected in both SDGs due to initial and continuing calibration RRF < 0.05 in the VOC 8260B by SIMs analysis.

4.2 Holding Time

All samples were received in good condition and within the technical holding time for analytes except for as single the noncompliance issue. The noncompliance issues was regarding a single sample receipt temperatures (i.e. >4 °C but <10 °C). In accordance with Region 2 SOPs, no action was taken since the elevated temperature was within 4 °C ± 2 °C for pesticides and polychlorinated biphenyls (PCBs) methods; and <10 °C for VOC, SVOC, and inorganic methods.

4.3 Initial Calibration Verification

ICV was completed at the appropriate frequency, as required. All ICVs associated with the sample analyses met the applicable criteria for acceptable performance except the noncompliance issues listed in **Table C.**

4.4 Continuing Calibration Verification

CCVs are used to verify the validity of the initial instrument. CCVs were completed at the appropriate frequency, as required. All CCVs met the criteria for acceptable performance except the noncompliance issues listed in **Table D**.

4.5 Initial and Continuing Calibration Blank, Preparation Blank, and Field Blank Analyses

All method and equipment blanks met the criteria for acceptable performance except the noncompliance issues listed in **Table E**.

4.6 Quantitative Limits

The quantitative limits for all methods analyses met acceptable performance for each analysis method and matrix.

4.7 CRDL Check

Contract Required Detection Limit (CRDL) checks met acceptable performance criteria except the noncompliance issues listed in **Table F**.

4.8 System Monitoring

System monitoring compounds (surrogate) recovery met acceptable performance criteria.

4.9 Internal Standard

Internal standard compounds recovery met acceptable performance criteria.

4.10 Accuracy

The accuracy of the analytical results is evaluated in the following sections in terms of analytical bias (matrix spike and LCS recoveries).

4.10.1 Matrix Spike Recoveries

Matrix spike samples are used to determine laboratory performance for the sample matrix under analysis. Matrix spike analyses were completed at the required frequency and the applicable control limit for acceptable performance (i.e., 75-125 percent) except for those results listed in **Table G**.

4.10.2 Laboratory Control Sample Recoveries

LCSs are used to monitor laboratory efficiency for the analysis of a standard matrix that is similar to the samples. LCS recovery criteria for acceptable performance is 75-125 percent, and all LCS recoveries were acceptable except for those results listed in **Table H**.

4.10.3 Serial Dilution

Serial Dilutions are used to monitor laboratory performance of a 5-fold dilution of a project sample and spiked with a known concentration. Serial dilution recovery criteria for acceptable performance are %D ≤ 10% conc ≥ 25xDL (Hg) and 10x IDL (metals) for 5-fold dilution, and all serial dilution %D were acceptable except for those results listed in **Table I**.

4.11 Precision

Precision is determined by evaluating the RPD of the parent/field duplicate and the parent/laboratory duplicate. The results reported by the laboratory for duplicate sample analyses, and the frequency of analysis, met the criteria for acceptable performance except for those results listed in **Table J**. The control limit for the RPD of the duplicate analyses were ±35 percent (aqueous samples).

One parent/field duplicate sample pair was validated (20110317BW-MW-5V11.75FD and 20110317BW-MW-5V11.75N). The parent/field duplicate pairs RPDs were acceptable except for those results listed in **Table J**.

4.12 Field Quality Control Samples

The results for all field quality control samples were evaluated. The field quality control samples included equipment blanks and field duplicate samples. The results of the equipment blanks were discussed above (Section 4.4).

4.13 TLC Analtyes

Table K summarizes the noncompliance issues for samples with detected TCL analytes.

Appendix B
Table A
Summary of Validated Analysis Methods
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

Sample ID	Sample Date	Sample Type	SDG	Validated	VOC (8260B)	VOC by SIMS (8260B)	SVOC (8270C)	SVOC by SIMS (8270C)	Pesticide (8081A)	PCBs (8082)	Total Metals (EPA 200.8)	Total Mercury (EPA 245.1)	Cyanide (SM 4500)	Dissolved Metals (EPA 200.8)	Dissolved Mercury (EPA 245.1)
20110314BW-MW-2V7.0N	3/14/2011	normal	J24087	N	X	X	X	X	X	X	X	X	X	X	X
20110314BW-MW-3V11.0N	3/14/2011	normal	J24087	N	X	X	X	X	X	X	X	X	X		
20110314CF-MW-1V11.81N	3/14/2011	normal	J24087	N	X	X	X	X	X	X	X	X	X		
20110314VVEB	3/14/2011	EB	J24087	N	X	X	X	X	X	X	X	X	X		
20110314VVTB	3/14/2011	TB	J24087	N	X										
20110315CF-MW-10V13.0N	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315CF-MW5V13SN	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315CF-MW6V14.0FD	3/15/2011	field dup	J24182	N	X	X	X	X	X	X	X	X	X		
20110315CF-MW6V14.0N	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315CF-MW-9V13.0N	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315CPMW-8V14.0N	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315MW-7V14.37N	3/15/2011	normal	J24182	N	X	X	X	X	X	X	X	X	X		
20110315VTB	3/14/2011	TB	J24182	N	X	X									
20110315VVEB	3/15/2011	EB	J24182	N	X	X	X	X	X	X	X	X	X		
20110316 VVEB	3/16/2011	EB	J24264	N	X	X	X	X	X	X	X	X	X		
20110316BW-MW-1V6.25N	3/16/2011	lab dup	J24264												
20110316BW-MW-1V6.25N	3/16/2011	MS	J24264												
20110316BW-MW-1V6.25N	3/16/2011	MSD	J24264												
20110316BW-MW-1V6.25N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X	X	X
20110316BW-MW-7V7.0N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X	X	X
20110316BW-MW-8V7.0N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X	X	X
20110316CF-MW-3V 14.0N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X		
20110316CF-MW-4V12.8N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X		
20110316MW-10V8N	3/16/2011	normal	J24264	Y	X	X	X	X	X	X	X	X	X	X	X
20110316VVTB	3/16/2011	TB	J24264	N	X										
20110317BW-MW-4V12.0N	3/17/2011	normal	J24309	Y	X	X	X	X	X	X	X	X	X	X	X
20110317BW-MW-5V11.75FD	3/17/2011	field dup	J24309	Y	X	X	X	X	X	X	X	X	X		
20110317BW-MW-5V11.75N	3/17/2011	normal	J24309	Y	X	X	X	X	X	X	X	X	X		
20110317BW-MW-6V9.5N	3/17/2011	normal	J24309	Y	X	X	X	X	X	X	X	X	X	X	X
20110317CF-MW-12V9.5N	3/17/2011	normal	J24309	Y	X	X	X	X	X	X	X	X	X		
20110317CF-MW-2V14.5N	3/17/2011	lab dup	J24309												
20110317CF-MW-2V14.5N	3/17/2011	MS	J24309												
20110317CF-MW-2V14.5N	3/17/2011	MSD	J24309												
20110317CF-MW-2V14.5N	3/17/2011	normal	J24309	Y	X	X	X	X	X	X	X	X	X		
20110317VVEB	3/17/2011	EB	J24309	N	X	X	X	X	X	X	X	X	X		
20110317VVTB	3/17/2011	TB	J24309	N	X										
20110318CF-MW11V13.0N	3/18/2011	normal	J24347	Y	X	X	X	X	X	X	X	X	X		
20110318VVEB	3/18/2011	EB	J24347	N	X	X	X	X	X	X	X	X	X		
20110318VVTB	3/17/2011	TB	J24347	N	X										

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	SVOC (SW-846 8270C) and (SW846 8270C by SIMs)	Pesticide (SW-846 8081A)	PCB (SW-846 8082)	Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)
Data Completeness, Holding Times, Preservation, & Solids Percentage	Cooler temp < 4 ºC. Samples holding time requirement < 7 days (<14 days if HCL preserved). Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days. Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 C. Holding Time Hg < 28 days, CN < 14 days, and all other metals < 180 days from collection.
System Monitoring Compounds	recoveries within limits (70 - 130%) or laboratory established limits	Recoveries for all samples within lab established limits or USEPA (2008) limits?	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	
Matrix Spike/Matrix Spike Duplicates	MS/MSD: 1 per 20 project samples. Recoveries within lab limits (or 70-130%). RPD <22%	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 50%.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-36.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 20%. Spike Recovery limits 75-125%
Lab Control Sample/Duplicate		Recoveries within lab limits (or 70-130%).	LCS/LCSD: 1 per 20 project samples. Recoveries within limits specified in Region 2 SOP HW-36.	LCS/LCSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	LCS/LCSD: 1 per 20 project samples or each preparation batch. LCS limits within 80-120%.
Blanks	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	CC Blank Conc < 3xIDL. Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.
GC/MS Instrument Performance Check	Performance check every 12 hours per instrument. Ion abundances normalized to m/z 95.	Instrument performance check analyzed for every 12 hrs per instrument. Ion abundances normalized to m/z 198.	Chromatogram baselines stable.	Chromatogram baselines stable.	
TCL Analytes	RRT within 0.06 RRT units of standard RRT in CV.4. Relative intensities of characteristic ions within ± 30% of reference MS.	RRT of TCL within 0.06 RRT units of standard RRT in CV. Relative intensities of characteristic ions within ± 30% of reference MS.	RTs of TCL within established RT windows for both columns. %D <25%.	RTs of identified PCBs within established RT windows for both columns. %D for positive sample results on two GC columns <25%.	
Tentatively Identified Compounds	No TCLs are listed as TIC. Ions in reference MS with relative intensity≥10% present in sample MS. TIC and "best match" standard relative ion intensities agree within ± 20%.	No TCLs are listed as TIC.Ions in reference MS with relative intensity ≥10%. TIC & "best match" standard relative ion intensities agree within ± 20%.	NA		

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	SVOC (SW-846 8270C) and (SW846 8270C by SIMs)	Pesticide (SW-846 8081A)	PCB (SW-846 8082)	Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)
Reported Quantitation Limits	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	
CRDL Standard					CRDL results btw 70-130%
GC/MS Initial Calibration	%RSD ≤ 20%. Average RRFs > 0.050.	%RSD ≤ 20%. Average RRFs > 0.050.	ICV performed at start of analytical sequence. %RSD ≤ 20%. RTs within established windows.	ICV performed at start of analytical sequence. %RSD ≤ 15% for 3 of 5 peaks. RTs within established windows.	r^2 ≥ 0.995 CCV every 10 samps or 2 hours ICV/CCV %R btw 90-110%
GC/MS Continuing Calibration	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed after every 10 samples & at end of each analytical sequence. %D ≤ 25%. RTs within windows established during initial calibration.	CV performed after every 10 samples & at end of each analytical sequence. %RSD ≤ 50% for 3 of the 5 peaks. RTs within windows established during initial calibration.	
Internal Standards	IS areas of samples & blank within (-50% to + 100%). RTs < 30 seconds.	IS areas within (-50% to + 100%). RTs of IS within 30 seconds.			
Duplicate	All % RPD ≤ 30%?	% RPD ≤ 30%.	% RPD ≤ 30%.	% RPD ≤ 30%.	RPD < 35% or Absolute Diff < 2 RL when samp/dup value < 5x RL
ICP Interference Check Sample (ICS)					ICS results within 80-120%.
Serial Dilution					Performed on samples of a similar matrix or 1 per 20 samples. %D ≤ 10% conc ≥ 25xDL (7470A/7471A) and 10x IDL (6010B) for 5-fold dilution.

RT = Retention Time	%D = Percent Deviation	%RPD = Relative Percent Difference	RRF = Relative Response Factor
TCL = Target Compound List	TIC = Tentatively Identified Compound	%RSD = Percent Relative Standard Deviation	CCV = Continuing Calibration Verification

Appendix B
Table C
Summary of Initial Calibration Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Sample	Analysis Method	Reason	Action
J24264	all project samples	VOC (SW-846 8260B)	ICAL (Cal ID 10086, Instr. VOAMS4) run on 3/10/11 21:07 to 3/11/11 03:18. Average RRF was greater than or equal to 0.05 for all target compounds except for 1,4-Dioxane (0.0034).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24264	all project samples	VOC (SW-846 8260B by SIMS)	ICAL (Cal ID 9396, Instr. VOAMS11) run on 1/25/11 20:48 to 1/25/11 23:38. Average RRF was greater than or equal to 0.05 for all target compounds except for 1,4-Dioxane (0.006).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24309	all project samples	VOC (SW-846 8260B)	ICAL (Cal ID 10086, Instr. VOAMS4) run on 3/10/11 21:07 to 3/11/11 03:18. Average RRF was greater than or equal to 0.05 for all target compounds except for 1,4-Dioxane (0.0034).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24309	all project samples	VOC (SW-846 8260B by SIMS)	ICAL (Cal ID 9396, Instr. VOAMS11) run on 1/25/11 20:48 to 1/25/11 23:38. Average RRF was greater than or equal to 0.05 for all target compounds except for 1,4-Dioxane (0.006).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).

Appendix B
Table D
Summary of Continuing Calibration Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Sample	Analysis Method	Reason	Action
J24264	all project samples	VOC (SW-846 8260B)	CC (File ID d07438.d, Instr. VOAMS4) on 3/22/11 at 07:55. % D was within QC limits (20%) for all target compounds except for the following: Acetone (37.7%), Chloroethane (26.7%), Carbon disulfide (22.7%), Methyl acetate (32.5%), MTBE (23.7%), Carbon tetrachloride (-30.9%), 2-Butanone (33.3%), 1,4-Dioxane (-29.9%), Tetrachloroethene (-25.5%), 4-Methyl-2-pentanone (34.9%), 2-Hexanone (44.4%), 1,3,5-Trichlorbenzene (-30%).	Qualify projects sample results for the above compounds as J.
J24264	all project samples	VOC (SW-846 8260B)	CC (File ID d07438.d, Instr. VOAMS4) on 3/22/11 at 07:55. Average RRF was greater than 0.05 for all target compounds except for 1,4-Dioxane (0.0024).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24264	all project samples	VOC (SW-846 8260B by SIMS)	CC (File ID n56287.d, Instr. VOAMS11) was conducted on 3/21/11 at 16:59. % D was within laboratory limit (50%) but above Region 2 SOP QC limits (20%) for all target compounds. 1,4-Dioxane (-32.9%), Ethylene Dibromide (-26.1%), and 1,2-Dibromo-3-Chloropropane (-28.6%).	Qualify projects sample results for the above compounds as J.
J24264	all project samples	VOC (SW-846 8260B by SIMS)	CC (File ID n56287.d, Instr. VOAMS11) was conducted on 3/21/11 at 16:59. Average RRF was greater than 0.05 for all target compounds except 1,4-Dioxane (0.004).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24309	all project samples	VOC (SW-846 8260B)	CC (File ID d07546.d, Instr. VOAMS4) on 3/24/11 at 09:34. % D was within QC limits (20%) for all target compounds except for the following: Dichlorodifluoromethane (-47.6%), Fren TF (-23.8%), Carbon tetrachloride (-28.1%), Methyl Cyclohexane (-31.6%), 1,4-Dioxane (-24.9%), 4-Methyl-2-pentanone (20.1%), and 2-Hexanone (28.0%)	Qualify projects sample results for the above compounds as J.
J24309	all project samples	VOC (SW-846 8260B)	CC (File ID d07546.d, Instr. VOAMS4) on 3/24/11 at 09:34. Average RRF was greater than 0.05 for all target compounds except for 1,4-Dioxane (0.0026).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).
J24309	all project samples	VOC (SW-846 8260B by SIMS)	CC (File ID n56381.d, Instr. VOAMS11) was conducted on 3/23/11 at 12:11. % D was within laboratory limit (50%) but above Region 2 SOP QC limits (20%) for all target compounds. 1,4-Dioxane (-24.7%), Ethylene Dibromide (-25.3%), and 1,2-Dibromo-3-Chloropropane (-21.8%).	Qualify projects sample results for the above compounds as J.
J24309	all project samples	VOC (SW-846 8260B by SIMS)	CC (File ID n56381.d, Instr. VOAMS11) was conducted on 3/23/11 at 12:11. Average RRF was greater than 0.05 for all target compounds except 1,4-Dioxane (0.0045).	Qualify projects sample 1,4-Dioxane detects as J and non-detects as rejected (R).

Appendix B
Table E
Summary of Blank Contamination Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24264	CCB analyzed on 3/21/2011 for metals every ten samples. CCB4 at 15:28 did not detect any metals. CCB5 at 16:00 detected Se (0.416 J). CCB7 at 17:51 detected Se (0.436 J). CCB8 at 18:36 did not detect any metals.	Metals (EPA 200.8) Total and Dissolved	NA	Between CCB4 and CCB5 no project samples were analyzed, no action was taken. Between CCB6 and CCB7 project samples 20110316BW-MW-7V7.0N, 20110316BW-MW-8V7.0N, and 20110316MW-10V8N were analyzed. Selenium was not detected in any of these project samples, therefore no action was taken. Between CCB7 and CCB8 project samples 20110316BW-MW-1V6.25N and 20110316CF-MW-4V12.8N were analyzed. Sample 20110316BW-MW-1V6.25N detected Se at the CRDL; and sample 20110316CF-MW-4V12.8N was non-detect. Therefore no action was taken.
J24264	No TCLs or TICs were detected in the equipment blank (20110316 VVEB) except Acetone (8.6 J ug/L).	VOA (SW846 8260B)	NA	No action was taken on equipment blank since Acetone was not detected in the MB or TB.

Appendix B
Table F
Summary of CRDL Check
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24264	CRDL analyses was not performed on cyanide.	Cyanide (SM 4500 CN E)	All project sample cyanide results were non-detect except 20110316CF-MW-4V12.8N, which was detected at the CRQL.	Qualify project samples as J since a CRDL analysis was not performed.
J24309	CRDL analyses was not performed on cyanide.	Cyanide (SM 4500 CN E)	All project sample cyanide results were non-detect.	Qualify project samples as J since a CRDL analysis was not performed.

Appendix B
Table G
Summary of Matrix Spike Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24264	Project sample 20110316BW-MW-1V6.25N was used for the MS/MSD for this SDG. All MS/MSD recoveries were within laboratory limits except the following: 2-Butanone (132% MS 138% MSD), 2-Hexanone (125% MS 124% MSD), and 1,4-Dioxane (46% RPD).	VOA (SW846 8260B)	all project samples	Qualify project sample detects for 2-Butanone and 2-Hexanone as J.
J24264	MS/MSD analyses were conducted on 20110316BW-MW-1V6.25N. All recoveries were within lab limits except for Arcoclor-1260 (72% MS 44% MSD w RPD 49%). No TCLs were detected in the original sample.	PCB (SW846 8082)	all project samples	Qualify project sample results as J due to low recovery.
J24309	Project sample 20110317CF-MW-2V14.5N was used for the MS/MSD for this SDG. All MS/MSD recoveries were within laboratory limits except the following: 4-Methyl-2-pentanone (126% MS 136% MSD), 1,1,2,2-Tetrachloroethane (127% MS 130% MSD), 1,2-Dibromo-3-Chloropropane (117% MS 125% MSD), and 1,2,3-Trichlorobenzene (124% MSD).	VOA (SW846 8260B)	all project samples	Qualify project sample detects for the above analytes as J.
J24309	MS/MSD analyses were conducted on project sample 20110317CF-MW-2V14.5N. All MS recoveries were within laboratory limits. All MSD recoveries were below laboratory limits with RPDs > 30%.	Pesticides (SW846 8081A)	all project samples	Parent sample 20110317CF-MW-2V14.5N was non-detect for all target compounds; therefore no action was taken based on MSD results.
J24309	MS/MSD analyses were conducted twice on project sample 20110317CF-MW-2V14.5N. All recoveries were within lab limits except for Arcoclor-1260 (69% MS 67% MSD, 64% MS 63% MSD). No TCLs were detected in the original sample.	PCB (SW846 8082)	all project samples	Qualify project sample results as J due to low recovery.

Appendix B
Table H
Summary of Laboratory Control Sample Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24309	A LCS was available for this SDG; all recoveries were within laboratory limits except 1,2,3-Trichlorobenzene was above the lab limit.	VOA (SW846 8260B)	all project samples	Qualify detections of 1,2,3-Trichlorobenzene as J in all project samples.
J24309	Two LCS/LCD were available for this SDG; all recoveries were within laboratory limits and RPD was within the limits expect for 1,2-Dibromo-3-Chloropropane (31%).	VOA (SW846 8260B by SIMs)	all project samples	No action was taken on LCS RPD results alone.

Appendix B
Table I
Summary of Serial Dilution Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24264	The serial dilution analyses was not performed on this SDG.	Cyanide (SM 4500 CN E)	all project samples	Qualify all project samples as J, since a serial dilution was not analyzed.
J24309	The serial dilution analyses was not performed on this SDG.	Cyanide (SM 4500 CN E)	all project samples	Qualify all project samples as J, since a serial dilution was not analyzed.

Appendix B
Table J
Summary of Field Duplicate Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J24264	There were no field duplicate samples collected in this SDG. A lab duplicate was not analyzed for this SDG.	Cyanide (SM 4500 CN E)	all project samples	Qualify all project samples as J, since no duplicate was analyzed.
J24309	There was a field duplicate samples (20110317BW-MW-5V11.75FD and 20110317BW-MW-5V11.75N) collected in this SDG. RPDs were 37.5% for 1,4-Dioxane.	VOA (SW846 8260B by SIMs)	all project samples	Qualify field duplicate pair 1,4-Dioxane results as J.
J24309	A lab duplicate was not analyzed for this SDG.	Cyanide (SM 4500 CN E)	all project samples	Qualify all project samples as J, since no duplicate was analyzed.

Appendix B
Table K
Summary of TCL Analytes Issues
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Analysis Method	Noncompliance	Action
J24264	VOA (SW846 8260B)	The standard relative ion intensities generally agree within 30% for all TCLs detected except for the following: 1,1-Dichloroethene in 20110316BW-MW-8V7.0N 1,2-Dichloroethane in 20110316BW-MW-8V7.0N 1,4-Dichlorobenzene in 20110316CF-MW-4V12.8N Cis-1,2-Dichloroethene in 20110316BW-MW-7V7.0N, 20110316BW-MW-8V7.0N, 20110316BW-MW-1V6.25N, 20110316MW-10V8N Chlorobenzene in 20110316BW-MW-8V7.0N, 20110316CF-MW-4V12.8N Methyl Cyclohexane in 20110316CF-MW-4V12.8N	No action was taken as the predominant ion intensities were generally consistent with the reference.
J24309	VOA (SW846 8260B)	The standard relative ion intensities generally agree within 30% for all TCLs detected except for the following: 1,2-Dichloroethane in 20110317BW-MW-6V9.5N 1,4-Dichlorobenzene in 20110317BW-MW-5V11.75N, 20110317BW-MW-5V11.75FD Benzene in 20110317CF-MW-2V14.5N Cis-1,2-Dichloroethene in 20110317BW-MW-4V12.0N, 20110317BW-MW-6V9.5N Chlorobenzene in 20110317BW-MW-4V12.0N, 20110317BW-MW-5V11.75N, 20110317BW-MW-5V11.75FD Chloromethane in 20110317BW-MW-6V9.5N Vinyl Chloride in 20110317BW-MW-4V12.0N	No action was taken as the predominant ion intensities were generally consistent with the reference.
J24309	VOA (SW846 8260B by SIMs)	The standard relative ion intensities generally agree within 30% for all TCLs detected except for 1,4-Dioxane in samples 20110317BW-MW-4V12.0N and 20110317BW-MW-5V11.75N.	No action was taken as the predominant ion intensities were generally consistent with the reference.
J24309	Pesticides (SW846 8081A)	No pesticides were detected in any project samples. All analytes detected in the MS/MSD samples and LCS/LCSD samples had %Ds below 25% between the results from the two columns except for the following: MS: Alpha-BHC (26.3%), Heptachor Epoxide (26.1%), Endosulfan I (35.1%), 4,4-DDD (28.3%), 4,4-DDT (42.3%), Endrin Aldehyde (30%), Endosulfan Sulfate (31.9%), Methoxyychlor (31.5%), and Endrin Ketone (41.6%). MSD: Endrin Ketone (27.6%) LCS: Endrin Ketone (26.2%) All RTs were within the established windows.	No action was taken since all results were non-detect for pesticides.

Appendix B
Data Usability Report / Quality Assurance Review : Quarter 2 Groundwater Sampling
April 1, 2011 through June 30, 2011

1.0 Introduction

This report documents the data usability report, quality assurance review, and data validation results of samples collected as part of the Ventron/Velsicol Superfund Site OU-1 (OU-1) at the Rohm & Hass in Wood-Ridge and Carlstadt, New Jersey (the Site). The sampling event was conducted and is being reported in accordance with the Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E, Subchapter 4) (NJDEP, 2009). A summary of the number of samples is presented in the *Sample Sets* (Section 3).

The data usability report, quality assurance review, and data validation were conducted to verify that all project quality control requirements were met, and that the quality of the data is sufficient to support its intended purpose. Data validation and assignment of validation qualifiers was according to:

- USEPA's Region 2 SOP HW-2 "Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3 (SOP Revision 13)" (USEPA 2006).

The results of the quality assurance review are presented herein and summarized in **Tables A and B**. No data validation criteria non-conformance was identified and so data validation report tables C through K are not required to be attached to this report.

2.0 Data Validation Procedures

The data validation and quality assurance review included performance of a completeness audit and a review of the following parameters, where applicable: holding times, sample preservations, percentage of solids, quality control (QC) results of calibration, equipment blanks, preparation blanks, matrix spike (MS) analyses, laboratory control sample (LCS) performances, laboratory and field duplicates, reporting limits, and linear range. In performing the data validation, the raw data were spot-checked in accordance with the USEPA Region 2 and NJDEP SOP to evaluate whether there were any transcription errors. Data qualifiers were assigned during the quality assurance review when applicable control limits were not met, in accordance with USEPA Region 2 and/or NJDEP SOPs.

The following laboratory deliverables were reviewed during the data validation process:

- Chain-of-custody documentation to verify completeness of the data
- Case narratives discussing analytical problems (if any) and procedures

- Samples preparation logs or laboratory summary results forms to verify analytical holding times
- Results for initial calibration and continuing calibration verification to assess instrument performance
- Results for initial calibration blanks, continuing calibration blanks, and preparation blanks to check for laboratory contamination
- Results from matrix spike (MS) analysis and laboratory control samples (LCS) to evaluate analytical accuracy
- Results for applicable laboratory duplicate results to check analytical precision
- Method detection limits (MDLs) to verify that reporting limit (RL) requirements were met.

Results of these QA/QC procedures and data qualifiers applied during validation are discussed under the *Data Quality Assessment* section below. In addition, results for all applicable field quality control samples were reviewed. These results listed below provide additional information in support of the data usability report and quality assurance review.

- Field duplicate results comparison to evaluate sampling overall precision
- Results of equipment blanks and field blanks to evaluate potential field contamination

3.0 Sample Sets

Sample analysis was conducted by TestAmerica, Inc. for all groundwater samples. **Table A** summarizes number of samples and duplicates collected.

3.1 Analytical Methods

Table A summarizes the analysis methods performed on each sample.

3.2 Sample Delivery Groups

Two of the three sample delivery groups (SDGs) were validated as part of the Quarterly Report 1. The data packages contained all documentation and data necessary to conduct the data usability report, quality assurance review, and data validation. The other SDG was not validated, but their Case Narratives were reviewed for any performance issues the laboratory reported.

3.3 Data Acceptability Report

The Data Acceptability Report (DAR) was conducted to monitor laboratory performance with respect to contract issues and methods requirements. The project requirements were that 50% of the collected data shall be validated according to NJDEP and USEPA Region 2 SOPs. A total of nine (9) samples and one (1) field duplicate were analyzed with four (4) of them selected for laboratory filtration and analysis. Two SDGs (J24186 and J24239) were selected for validated due to having >50% of the samples, presence of a field duplicate, two (2) MS analyses [one designated on chain-of-custody (COC) record and one selected by the laboratory] and one of three SDGs analyzed for dissolved mercury. The SDGs contained a total of 13 samples, one field blank (FB), one equipment blank (EB), and a field duplicate. The USEPA Region 2 criteria are summarized in **Table B**.

For the remaining SDG (J24238), case narratives were reviewed for any notable non-compliance issues reported by the laboratory. No gross data quality noncompliance issues were reported by the laboratory.

4.0 Data Quality Assessment

The SDGs that were validated are discussed below. The laboratory data were evaluated in terms of completeness, holding times, preparation blanks, quantitative limits, CRDL check, accuracy, precision, and field quality control samples.

4.1 Completeness

The results reported by the laboratory were 100-percent usable; no sample results were rejected out of thirteen (13) samples result data points.

4.2 Holding Time

All samples were received in good condition and within the technical holding time for analytes except for a single noncompliance issue. The noncompliance issue was regarding a single sample receipt temperatures (i.e., >4 °C but <10 °C). In accordance with Region 2 SOPs, no action was taken, and the sample was considered acceptable since the elevated temperature was within 4 °C ± 2 °C.

4.3 Initial Calibration Verification

ICV was completed at the appropriate frequency, as required. All ICVs associated with the sample analyses met the applicable criteria for acceptable performance.

4.4 Continuing Calibration Verification

CCVs are used to verify the validity of the initial instrument. CCVs were completed at the appropriate frequency, as required. All CCVs met the criteria for acceptable performance.

4.5 Initial and Continuing Calibration Blank, Preparation Blank, Equipment Blank, and Field Blank Analyses

All method and equipment blanks met the criteria for acceptable performance; mercury was not detected in any blank.

4.6 Quantitative Limits

The quantitative limits for all methods analyses met acceptable performance for each analysis method and matrix.

4.7 CRDL Check

Contract Required Detection Limit (CRDL) check is not applicable to method EPA 245.1.

4.8 System Monitoring

System monitoring compounds (surrogates) are not applicable to method EPA 245.1.

4.9 Internal Standard

Internal standard compounds are not applicable to method EPA 245.1.

4.10 Accuracy

The accuracy of the analytical results is evaluated in the following sections in terms of analytical bias (matrix spike and LCS recoveries).

4.10.1 Matrix Spike Recoveries

MS samples are used to determine laboratory performance for the sample matrix under analysis. MS analyses were completed at the required frequency and the applicable control limit for acceptable performance. Sample 2110628BWMW-5V11.75N (lab ID 480-28186-3) was used as an MS sample, as designated on the COC record, for total mercury analysis and sample 2110629BWMW-8V7N (lab ID 480-28239-2) was selected by the laboratory and used as an MS sample for dissolved mercury analysis.

4.10.2 Laboratory Control Sample Recoveries

LCSs are used to monitor laboratory efficiency for the analysis of a standard matrix that is similar to the samples. LCS recovery criteria for acceptable performance is 75-125 percent, and all LCS recoveries were acceptable.

4.10.3 Serial Dilution

Serial Dilutions are used to monitor laboratory performance of a 5-fold dilution of a project sample and spiked with a known concentration. Serial dilution recovery criteria for acceptable performance are %D≤ 10% conc ≥ 25xDL (Hg), and all serial dilution %D were acceptable. Sample 2110628BWMW-5V11.75N (lab ID 480-28186-3) was used for serial dilution for total mercury analysis and 2110629BWMW-8V7N (lab ID 480-28239-2) was used for serial dilution for dissolved mercury analysis.

4.11 Precision

Precision is determined by evaluating the RPD of the parent/field duplicate and the parent/laboratory duplicate. The results reported by the laboratory for duplicate sample analyses, and the frequency of analysis, met the criteria for acceptable performance. The control limit for the RPD of the duplicate analyses was ±35 percent (aqueous samples).

One parent/field duplicate sample pair was collected and was validated (20110628BWMW-3V11.5FD and 20110628BWMW-3V11.5N). The parent/field duplicate pairs RPDs were acceptable; mercury was not detected.

Sample 2110628BWMW-5V11.75N (lab ID 480-28186-3) was analyzed as a laboratory duplicate for total mercury analysis and sample 2110629BWMW-8V7N (lab ID 480-28239-2) was analyzed as a laboratory duplicate for dissolved mercury analysis.

4.12 Field Quality Control Samples

The results for all field quality control samples were evaluated. The field quality control samples included equipment blanks and field duplicate samples. The results of the equipment blanks were discussed above (Section 4.4).

4.13 TLC Analtyes

No non-compliance issues were identified for samples with detected TCL analytes (mercury).

Appendix B
Table A
Summary of Validated Analysis Methods
Quarter 2 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

Sample ID	Sample Date	Sample Type	SDG	Validated	Total Mercury (EPA 245.1)	Dissolved Mercury (EPA 245.1)
20110628BWMW-3V11.5N	6/28/2011	normal	J28186	Yes	X	
20110628BWMW-3V11.5FD	6/28/2011	field dup	J28186	Yes	X	
20110628BWMW-5V11.75N	6/28/2011	normal	J28186	Yes	X	
20110628BWMW-5V11.75N	6/28/2011	MS	J28186	Yes	X	
20110628BWMW-5V11.75N	6/28/2011	lab dup	J28186	Yes	X	
20110628BWMW-6V10N	6/28/2011	normal	J28186	Yes	X	
20110628BWMW-7V7N	6/28/2011	normal	J28186	Yes	X	
201106281VV-FB	6/28/2011	FB	J28186	Yes	X	
20110629BWMW-2V7N	6/29/2011	normal	J28238	No	X	
20110629BWMW-8V7N	6/29/2011	normal	J28238	No	X	
20110629BWMW-1V7N	6/29/2011	normal	J28238	No	X	
20110629BWMW-4V12N	6/29/2011	normal	J28238	No	X	
20110629VVEB	6/29/2011	EB	J28238	No	X	
20110629BWMW-2V7N	6/29/2011	normal	J28239	Yes	X	X
20110629BWMW-8V7N	6/29/2011	normal	J28239	Yes	X	X
20110629BWMW-1V7N	6/29/2011	normal	J28239	Yes	X	X
20110629BWMW-4V12N	6/29/2011	normal	J28239	Yes	X	X
20110629VVEB	6/29/2011	EB	J28239	Yes	X	X

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 2 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	Mercury (EPA 245.1) Total and Dissolved Cyanide (SM 4500 CN E)
Data Completeness, Holding Times, Preservation, & Solids Percentage	Cooler temp < 4 C. Holding Time Hg < 28 days
System Monitoring Compounds	
Matrix Spike/Matrix Spike Duplicates	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 20%. Spike Recovery limits 75-125%
Lab Control Sample/Duplicate	LCS/LCSD: 1 per 20 project samples or each preparation batch. LCS limits within 80-120%.
Blanks	CC Blank Conc < 3xIDL. Method blanks: 1 per 20 project samples. No TCL detected in MB, TB, FB, or EB.
GC/MS Instrument Performance Check	
TCL Analytes	
Tentatively Identified Compounds	

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 2 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	Mercury (EPA 245.1) Total and Dissolved Cyanide (SM 4500 CN E)
Reported Quantitation Limits	
CRDL Standard	CRDL results btw 70-130%
GC/MS Initial Calibration	r^2 $\geq$ 0.995 CCV every 10 samps or 2 hours ICV/CCV %R btw 90-110%
GC/MS Continuing Calibration	
Internal Standards	
Duplicate	RPD < 35% or Absolute Diff < 2 RL when samp/dup value < 5x RL
ICP Interference Check Sample (ICS)	
Serial Dilution	Performed on samples of a similar matrix or 1 per 20 samples. %D ≤ 10% conc ≥ 25xDL (7470A/7471A)

RT = Retention Time
TCL = Target Compound List

Appendix B
Data Usability Report / Quality Assurance Review: Quarter 3 Groundwater Sampling
July 1, 2011 through September 30, 2011

1.0 Introduction

This report documents the data usability report, quality assurance review, and data validation results of samples collected from the Ventron/Velsicol Superfund Site OU-1 (OU-1) located in Wood-Ridge and Carlstadt, New Jersey (the Site). The sampling event was conducted as part of ongoing OM&M activities and is being reported in accordance with the Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E, Subchapter 4) (NJDEP, 2009). A summary of the number of samples is presented in the *Sample Sets* (Section 3).

The data usability report, quality assurance review, and data validation were conducted to verify that all project quality control requirements were met, and that the quality of the data is sufficient to support its intended purpose. Data validation and assignment of validation qualifiers was according to:

- U.S. Environmental Protection Agency's (USEPA's) Region 2 Standard Operating Procedure (SOP) HW-24 "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B" (USEPA 2006).
- USEPA's Region 2 SOP HW-2 "Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3 (SOP Revision 13)" (USEPA 2006).

The results of the quality assurance review are presented herein and summarized in **Tables A and B.** No data validation criteria non-conformance was identified and so data validation report tables C through K are not required to be attached to this report.

2.0 Data Validation Procedures

The data validation and quality assurance review included performance of a completeness audit and a review of the following parameters, where applicable: holding times, sample preservation, calibration results, trip blank (TB) analyses, equipment blank (EB) analyses, method (preparation) blank analyses, matrix spike (MS) analyses, laboratory control sample (LCS) analyses, laboratory duplicate analyses, and field duplicate (FD) pair analyses, reporting limits, and analytical linear range. In performing the data validation, the raw data were spot-checked in accordance with the USEPA Region 2 and NJDEP SOP to evaluate whether there were any transcription errors. Data qualifiers would have been assigned during the quality assurance review if applicable control limits were not met, in accordance with USEPA Region 2 and/or NJDEP SOPs.

The following laboratory deliverables were reviewed during the data validation process:

- Chain-of-custody documentation to verify completeness of the data
- Case narratives discussing analytical problems (if any) and procedures
- Samples preparation logs or laboratory summary results forms to verify analytical holding times
- Results for initial calibration verification and continuing calibration verification to assess instrument performance
- Results for initial calibration blanks, continuing calibration blanks, and method (preparation) blanks to check for laboratory contamination
- Results from MS analysis and LCS analysis to evaluate analytical accuracy
- Results for applicable matrix spike duplicate (MSD) results and laboratory duplicate results to check analytical precision
- Results for applicable FD pair results to check total precision of the sampling and analysis process.
- Method detection limits (MDLs) to verify that reporting limit (RL) requirements were met.

Results of these quality assurance/quality control (QA/QC) procedures and data qualifiers applied during validation are discussed under the *Data Quality Assessment* section below. In addition, results for all applicable field quality control samples were reviewed. These results listed below provide additional information in support of the data usability report and quality assurance review:

- FD results to evaluate sampling overall precision;
- EB results to evaluate potential field contamination; and,
- TB results to evaluate potential sample contamination.

3.0 Sample Sets

Sample analysis was conducted by TestAmerica, Inc. for all groundwater samples. **Table A** summarizes number of samples and duplicates collected.

3.1 Analytical Methods

Table A summarizes the analysis methods performed on each sample.

3.2 Sample Delivery Groups

Two of the four sample delivery groups (SDGs) were validated as part of the Quarterly Report 3. The data packages contained all documentation and data necessary to conduct the data usability report, quality assurance review, and data validation. The other two SDGs were not validated, but their Case Narratives were reviewed for any performance issues the laboratory reported.

3.3 Data Acceptability Report

The Data Acceptability Report (DAR) was conducted to monitor laboratory performance with respect to contract issues and methods requirements. The project requirements were that 50% of the collected data shall be validated according to NJDEP and USEPA Region 2 SOPs. A total of 21 samples and two field duplicates were analyzed with 5 of them selected for laboratory filtration and analysis for metals. Two SDGs (460-30950 and 460-30955) were selected for validated due to having >50% of the samples, presence of a field duplicate, and one set of a matrix spike pair. The validated SDGs contained a total of 11 samples, two equipment blanks (EBs), two trip blanks (TBs), and one field duplicate.

The USEPA Region 2 criteria are summarized in **Table B**.

For the remaining SDGs (460-30707 and 460-30741), the case narratives were reviewed for any notable non-compliance issues reported by the laboratory. No gross data quality noncompliance issues were reported by the laboratory.

4.0 Data Quality Assessment (DQA)

The SDGs that were validated are discussed below. The laboratory data were evaluated in terms of completeness, holding times, preparation blanks, quantitative limits, CRDL check, accuracy, precision, and field quality control samples.

4.1 Completeness

The results reported by the laboratory were 100-percent usable; no sample results were rejected.

4.2 Holding Time

All samples were received in good condition and within the technical holding time for all analytes for each analytical method.

4.3 Initial Calibration Verification (ICV)

ICV was completed at the appropriate frequency, as required. All ICVs associated with the sample analyses met the applicable criteria for acceptable performance.

4.4 Continuing Calibration Verification (CCV)

CCVs are used to verify the validity of the initial instrument. CCVs were completed at the appropriate frequency, as required. All CCVs met the criteria for acceptable performance.

4.5 Initial and Continuing Calibration Blank, Preparation Blank, and Field Blank Analyses

All initial calibration blanks, continuing calibration blanks, method (preparation) blanks, and field blanks (TBs and EBs) met the criteria for acceptable performance.

4.6 Quantitative Limits

The quantitative limits for all methods analyses met acceptable performance for each analysis method and matrix.

4.7 Contract-Required Detection Limit (CRDL) Check

CRDL checks met acceptable performance criteria.

4.8 System Monitoring

System monitoring compounds (surrogate) recovery met acceptable performance criteria.

4.9 Internal Standard

Internal standard compounds recovery met acceptable performance criteria.

4.10 Accuracy

The accuracy of the analytical results is evaluated in the following sections in terms of analytical bias (MS and LCS recoveries).

4.10.1 Matrix Spike Recoveries

MS samples are used to determine laboratory performance for the sample matrix under analysis. MS analyses were completed at the required frequency and the MS recovery criteria for acceptable performance was met for each analyte for all analytical methods using sample 20110908MW10V8N (lab ID 460-30960-6).

4.10.2 Laboratory Control Sample Recoveries

LCSs are used to monitor laboratory efficiency for the analysis of a standard matrix that is similar to the samples. The LCS recovery criteria for acceptable performance were met for each analytes for all analytical methods.

4.10.3 Serial Dilution

For methods EPA 200.8 (metals) and EPA 245.1 (mercury), serial dilutions are used to monitor laboratory performance of a 5-fold dilution of a project sample and spiked with a known concentration. Serial dilution recovery criteria for acceptable performance are %D ≤ 10% conc ≥ 25xDL (Hg) and 10x IDL (metals) for 5-fold dilution, and all serial dilution %D were acceptable for sample 20110908MW10V8N (lab ID 460-30960-6).

4.11 Precision

Precision is determined by evaluating the relative percent difference (RPD) of the parent/field duplicate and the parent/laboratory duplicate. The results reported by the laboratory for duplicate sample analyses, and the frequency of analysis, met the criteria for acceptable performance for sample 20110908MW10V8N (lab ID 460-30960-6); the MS %R result (174%R) for total mercury was outside the performance window (75-125%R), however, the sample concentration was greater than four times (4x) the spike amount so the MS results were not reliable or meaningful and were therefore not evaluated. The control limits for the RPD of the duplicate analyses were ±35 percent (aqueous samples).

One parent/FD sample pair was validated (20110908CFMW11V13FD and 20110908CFMW11V13N). The parent/FD pair RPD results for each analyte for all analytical methods were acceptable.

4.12 Field Quality Control Samples

The results for all field quality control samples were evaluated. The field quality control samples included TBs, EBs, and FDs. The results of the TB and EB analyses were discussed above (Section 4.5). The results of the FD analyses were discussed above (Section 4.11).

4.13 Target Compound List (TCL) Analtyes

There were no non-compliance issues for samples with detected TCL analytes.

Appendix B
Table A
Summary of Validated Analysis Methods
Quarter 3 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

Sample ID	Sample Date	Sample Type	SDG	Validated	VOC (8260B)	Total Arsenic (EPA 200.8)	Total Mercury (EPA 245.1)	Dissolved Arsenic (EPA 200.8)	Dissolved Mercury (EPA 245.1)
20110906BWMW3V11.0N	9/6/2011	Normal	460-30707-1	No	X	X	X		
20110906BWMW2V27N	9/6/2011	Normal	460-30707-2	No	X	X	X		
20110906VVEB	9/6/2011	EB	460-30707-3EB	No	X	X	X		
20110906VVTB	9/6/2011	TB	460-30707-4TB	No	X	X	X		
20110906BWMW7V7.0N	9/6/2011	Normal	460-30707-5	No	X	X	X		
20110906BWMW7V7.0N	9/6/2011	MS	460-30707-5MS	No	X	X	X		
20110906BWMW7V7.0N	9/6/2011	MSD	460-30707-5MSD	No	X	X	X		
20110906BWMW7V7.0N	9/6/2011	Lab dup	460-30707-5DU	No	X	X	X		
20110906BWMW1VN	9/6/2011	Normal	460-30707-6	No	X	X	X		
20110906BWMW1VFD	9/16/2011	Field dup	460-30707-7DU	No	X	X	X		
20110907BWMW4V12.0N	9/7/2011	Normal	460-30741-1	No	X	X	X		
20110907BWMW5V11.75N	9/7/2011	Normal	460-30741-2	No	X	X	X		
20110907CFMW12V9.5N	9/7/2011	Normal	460-30741-3	No	X	X	X		
20110907CFMW10V12.5N	9/7/2011	Normal	460-30741-4	No	X	X	X		
20110907CFMW9V13.0N	9/7/2011	Normal	460-30741-5	No	X	X	X		
20110907CFMW7V14.0N	9/7/2011	Normal	460-30741-6	No	X	X	X		
20110907VVEB	9/7/2011	EB	460-30741-7EB	No	X	X	X		
20110907VVTB	9/7/2011	TB	460-30741-8TB	No	X	X	X		
20110908CFMW3V13.7N	9/8/2011	Normal	460-30950-1	Yes	X	X	X		
20110908CFMW4V12.75N	9/8/2011	Normal	460-30950-2	Yes	X	X	X		
20110908CFMW5V13N	9/8/2011	Normal	460-30950-3	Yes	X	X	X	X	X
20110908CFMW6V13.5N	9/8/2011	Normal	460-30950-4	Yes	X	X	X	X	X
20110908CFMW11V13N	9/8/2011	Normal	460-30950-5	Yes	X	X	X		
20110908CFMW10V8N	9/8/2011	Normal	460-30950-6	Yes	X	X	X	X	X
20110908CFMW10V8N	9/8/2011	MS	460-30950-6MS	Yes	X	X	X		
20110908CFMW10V8N	9/8/2011	MSD	460-30950-6MSD	Yes	X	X	X		
20110908CFMW10V8N	9/8/2011	Lab dup	460-30950-6DU	Yes	X	X	X		
20110908CFMW10V8FD	9/8/2011	Field dup	460-30950-7FD	Yes	X	X	X		
20110908VVEB	9/8/2011	EB	460-30950-8EB	Yes	X	X	X		
20110908VVTB	9/8/2011	TB	460-30950-9TB	Yes	X	X	X		
20110909CFMW2V14.5N	9/9/2011	Normal	460-30955-1	Yes	X	X	X		
20110909CFMW8V14N	9/10/2011	Normal	460-30955-2	Yes	X	X	X		
20110909BWMW6V9.5N	9/11/2011	Normal	460-30955-3	Yes	X	X	X		
20110909BWMW8V7N	9/12/2011	Normal	460-30955-4	Yes	X	X	X	X	X
20110909BWMW1V7N	9/13/2011	Normal	460-30955-5	Yes	X	X	X	X	X
20110909VVEB	9/14/2011	EB	460-30955-6	Yes	X	X	X		
20110909VVTB	9/15/2011	TB	460-30955-7TB	Yes	X	X	X		

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 3 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	SVOC (SW-846 8270C) and (SW846 8270C by SIMs)	Pesticide (SW-846 8081A)	PCB (SW-846 8082)	Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)
Data Completeness, Holding Times, Preservation, & Solids Percentage	Cooler temp < 4 ºC. Samples holding time requirement < 7 days (<14 days if HCL preserved). Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days. Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 C. Holding Time Hg < 28 days, CN < 14 days, and all other metals < 180 days from collection.
System Monitoring Compounds	recoveries within limits (70 - 130%) or laboratory established limits	Recoveries for all samples within lab established limits or USEPA (2008) limits	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	
Matrix Spike/Matrix Spike Duplicates	MS/MSD: 1 per 20 project samples. Recoveries within lab limits (or 70-130%). RPD <22%	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 50%.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-36.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 20%. Spike Recovery limits 75-125%
Lab Control Sample/Duplicate		Recoveries within lab limits (or 70-130%).	LCS/LCSD: 1 per 20 project samples. Recoveries within limits specified in Region 2 SOP HW-36.	LCS/LCSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	LCS/LCSD: 1 per 20 project samples or each preparation batch. LCS limits within 80-120%.
Blanks	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	CC Blank Conc < 3xIDL. Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.
GC/MS Instrument Performance Check	Performance check every 12 hours per instrument. Ion abundances normalized to m/z 95.	Instrument performance check analyzed for every 12 hrs per instrument. Ion abundances normalized to m/z 198.	Chromatogram baselines stable.	Chromatogram baselines stable.	
TCL Analytes	RRT within 0.06 RRT units of standard RRT in CV.4. Relative intensities of characteristic ions within ± 30% of reference MS.	RRT of TCL within 0.06 RRT units of standard RRT in CV. Relative intensities of characteristic ions within ± 30% of reference MS.	RTs of TCL within established RT windows for both columns. %D <25%.	RTs of identified PCBs within established RT windows for both columns. %D for positive sample results on two GC columns <25%.	
Tentatively Identified Compounds	No TCLs are listed as TIC. Ions in reference MS with relative intensity≥10% present in sample MS. TIC and "best match" standard relative ion intensities agree within ± 20%.	No TCLs are listed as TIC.Ions in reference MS with relative intensity ≥10%. TIC & "best match" standard relative ion intensities agree within ± 20%.	NA		

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 3 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	SVOC (SW-846 8270C) and (SW846 8270C by SIMs)	Pesticide (SW-846 8081A)	PCB (SW-846 8082)	Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)
Reported Quantitation Limits	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	
CRDL Standard					CRDL results btw 70-130%
GC/MS Initial Calibration	%RSD ≤ 20%. Average RRFs > 0.050.	%RSD ≤ 20%. Average RRFs > 0.050.	ICV performed at start of analytical sequence. %RSD ≤ 20%. RTs within established windows.	ICV performed at start of analytical sequence. %RSD ≤ 15% for 3 of 5 peaks. RTs within established windows.	r^2 ≥ 0.995 CCV every 10 samps or 2 hours ICV/CCV %R btw 90-110%
GC/MS Continuing Calibration	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed after every 10 samples & at end of each analytical sequence. %D ≤ 25%. RTs within windows established during initial calibration.	CV performed after every 10 samples & at end of each analytical sequence. %RSD ≤ 50% for 3 of the 5 peaks. RTs within windows established during initial calibration.	
Internal Standards	IS areas of samples & blank within (-50% to + 100%). RTs < 30 seconds.	IS areas within (-50% to + 100%). RTs of IS within 30 seconds.			
Duplicate	All % RPD ≤ 30%?	% RPD ≤ 30%.	% RPD ≤ 30%.	% RPD ≤ 30%.	RPD < 35% or Absolute Diff < 2 RL when samp/dup value < 5x RL
ICP Interference Check Sample (ICS)					ICS results within 80-120%.
Serial Dilution					Performed on samples of a similar matrix or 1 per 20 samples. %D ≤ 10% conc ≥ 25xDL (7470A/7471A) and 10x IDL (6010B) for 5-fold dilution.

RT = Retention Time
TCL = Target Compound List
%D = Percent Deviation
TIC = Tentatively Identified Compound
%RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
RRF = Relative Response Factor
CCV = Continuing Calibration Verification

Appendix B
Data Usability Report / Quality Assurance Review: Quarter 4 Groundwater Sampling
October 1, 2011 through December 31, 2011

1.0 Introduction

This report documents the data usability report, quality assurance review, and data validation results of samples collected from the Ventron/Velsicol Superfund Site OU-1 (OU-1) located in Wood-Ridge and Carlstadt, New Jersey (the Site). The sampling event was conducted as part of ongoing OM&M activities and is being reported in accordance with the Technical Requirements for Site Remediation (TRSR) (N.J.A.C. 7:26E, Subchapter 4) (NJDEP, 2009). A summary of the number of samples is presented in the *Sample Sets* (Section 3).

The data usability report, quality assurance review, and data validation were conducted to verify that all project quality control requirements were met, and that the quality of the data is sufficient to support its intended purpose. Data validation and assignment of validation qualifiers was according to:

- U.S. Environmental Protection Agency's (USEPA's) Region 2 Standard Operating Procedure (SOP) HW-24 "Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B" (USEPA 2006).
- USEPA's Region 2 SOP HW-35 "Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2" (USEPA 2007).
- USEPA's Region 2 SOP HW-36 "Statement of Work for Organic Analysis of Low/Medium Concentration of Pesticide Organic Compounds SOM01.2" (USEPA 2007)
- USEPA's Region 2 SOP HW-37 "Statement of Work for Organic Analysis of Low/Medium Concentration of Aroclor Organic Compounds SOM01.2" (USEPA 2007)
- USEPA's Region 2 SOP HW-2 "Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO5.3 (SOP Revision 13)" (USEPA 2006).

The results of the quality assurance review are presented herein and summarized in **Tables A** through **H.**

2.0 Data Validation Procedures

The data validation and quality assurance review included performance of a completeness audit and a review of the following parameters, where applicable: holding times, sample preservation, calibration results, trip blank (TB) analyses, equipment blank (EB) analyses, method (preparation) blank analyses, matrix spike (MS) analyses, laboratory control sample (LCS) analyses, laboratory duplicate analyses, and field duplicate (FD) pair analyses, reporting limits, and analytical linear range. In performing the data validation, the raw data were spot-checked in accordance with the USEPA Region 2 and NJDEP SOP to evaluate whether there were any transcription errors. Data qualifiers would have been assigned during the quality assurance review if applicable control limits were not met, in accordance with USEPA Region 2 and/or NJDEP SOPs.

The following laboratory deliverables were reviewed during the data validation process:

- Chain-of-custody documentation to verify completeness of the data
- Case narratives discussing analytical problems (if any) and procedures
- Samples preparation logs or laboratory summary results forms to verify analytical holding times
- Results for initial calibration verification and continuing calibration verification to assess instrument performance
- Results for initial calibration blanks, continuing calibration blanks, and method (preparation) blanks to check for laboratory contamination
- Results from MS analysis and LCS analysis to evaluate analytical accuracy
- Results for applicable matrix spike duplicate (MSD) results and laboratory duplicate results to check analytical precision
- Results for applicable FD pair results to check total precision of the sampling and analysis process.
- Method detection limits (MDLs) to verify that reporting limit (RL) requirements were met.

Results of these quality assurance/quality control (QA/QC) procedures and data qualifiers applied during validation are discussed under the *Data Quality Assessment* section below. In addition, results for all applicable field quality control samples were reviewed. These results listed below provide additional information in support of the data usability report and quality assurance review:

- FD results to evaluate sampling overall precision;
- EB results to evaluate potential field contamination; and,
- TB results to evaluate potential sample contamination.

3.0 Sample Sets

Sample analysis was conducted by TestAmerica, Inc. for all groundwater samples. **Table A** summarizes number of samples and duplicates collected.

3.1 Analytical Methods

Table A summarizes the analysis methods performed on each sample.

3.2 Sample Delivery Groups

Two sample delivery groups (SDGs) were validated as part of the Quarterly Report 4. The data packages contained all documentation and data necessary to conduct the data usability report, quality assurance review, and data validation. The other two SDGs were not validated, but their Case Narratives were reviewed for any performance issues the laboratory reported.

3.3 Data Acceptability Report

The Data Acceptability Report (DAR) was conducted to monitor laboratory performance with respect to contract issues and methods requirements. The project requirements were that 50% of the collected data shall be validated according to NJDEP and USEPA Region 2 SOPs. A total of 10 samples and one field duplicates were analyzed with 5 of them selected for laboratory filtration and analysis for mercury. Two SDGs (J34358 and J34435) were validated. The validated SDGs contained a total of 10 samples, two equipment blanks (EBs), one trip blanks (TBs), and one field duplicate.

The USEPA Region 2 criteria are summarized in **Table B**.

For the remaining SDGs (J34358 and J34435), the case narratives were reviewed for any notable non-compliance issues reported by the laboratory. No gross data quality noncompliance issues were reported by the laboratory.

4.0 Data Quality Assessment (DQA)

The SDGs that were validated are discussed below. The laboratory data were evaluated in terms of completeness, holding times, preparation blanks, quantitative limits, CRDL check, accuracy, precision, and field quality control samples.

4.1 Completeness

The results reported by the laboratory were 100-percent usable; no sample results were rejected.

4.2 Holding Time

All samples were received in good condition and within the technical holding time for all analytes for each analytical method except sample 20111205BW-MW-2V7N (lab ID 460-34358-3) was analyzed for dissolved mercury two days beyond the 28 day holding time. The nondetected dissolved mercury result for this sample is qualified "UJ".

4.3 Initial Calibration Verification (ICV)

ICV was completed at the appropriate frequency, as required. All ICVs associated with the sample analyses met the applicable criteria for acceptable performance except for non-compliance issues listed in **Table C**.

4.4 Continuing Calibration Verification (CCV)

CCVs are used to verify the validity of the initial instrument. CCVs were completed at the appropriate frequency, as required. All CCVs met the criteria for acceptable performance except for non-compliance issues listed in **Table D**.

4.5 Initial and Continuing Calibration Blank, Preparation Blank, and Field Blank Analyses

All initial calibration blanks, continuing calibration blanks, method (preparation) blanks, and field blanks (TBs and EBs) met the criteria for acceptable performance except sample 20111206VVEB (lab ID 460-34435-6) detected sodium 190 J ug/L. No action was taken since method blanks were all non-detect.

4.6 Quantitative Limits

The quantitative limits for all methods analyses met acceptable performance for each analysis method and matrix.

4.7 Contract-Required Detection Limit (CRDL) Check

CRDL checks met acceptable performance criteria except for non-compliance issues listed in **Table E**.

4.8 System Monitoring

System monitoring compounds (surrogate) recovery met acceptable performance criteria.

4.9 Internal Standard

Internal standard compounds recovery met acceptable performance criteria.

4.10 Accuracy

The accuracy of the analytical results is evaluated in the following sections in terms of analytical bias (MS and LCS recoveries).

4.10.1 Matrix Spike Recoveries

MS samples are used to determine laboratory performance for the sample matrix under analysis. A non-project sample was used for the MS analyses and was completed at the required frequency. The MS recovery met acceptable performance criteria for each analyte for all analytical methods except for non-compliance issues listed in **Table F**.

4.10.2 Laboratory Control Sample Recoveries

LCSs are used to monitor laboratory efficiency for the analysis of a standard matrix that is similar to the samples. The LCS recovery criteria for acceptable performance were met for each analytes for all analytical methods.

4.10.3 Serial Dilution

For methods EPA 200.8 (metals) and EPA 245.1 (mercury), serial dilutions are used to monitor laboratory performance of a 5-fold dilution of a project sample and spiked with a known concentration. Serial dilution recovery criteria for acceptable performance are %D ≤ 10% conc ≥ 25xDL (Hg) and 10x IDL (metals) for 5-fold dilution, and all serial dilution %D were acceptable for samples 20111206MW-11V8N (lab ID 460-34435-1) and 20111205BW-MW-3V11.5N (lab ID 460-34358-1).

4.11 Precision

Precision is determined by evaluating the relative percent difference (RPD) of the parent/field duplicate and the parent/laboratory duplicate. The results reported by the laboratory for duplicate sample analyses, and the frequency of analysis, met the criteria for acceptable performance except for non-compliance issues listed in **Table G**.

One parent/FD sample pair was validated (20111206MW-11V8FD and 20111206MW-11V8N). The parent/FD pair RPD results for each analyte for all analytical methods were acceptable except for non-compliance issues listed in **Table G**.

4.12 Field Quality Control Samples

The results for all field quality control samples were evaluated. The field quality control samples included TBs, EBs, and FDs. The results of the TB and EB analyses were discussed above (Section 4.5). The results of the FD analyses were discussed above (Section 4.11).

4.13 Target Compound List (TCL) Analtyes

There were no non-compliance issues for samples with detected TCL analytes except for non-compliance issues listed in **Table H**.

Appendix B
Table A
Summary of Validated Analysis Methods
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

Sample ID	Sample Date	Sample Type	SDG	Validated	VOC (8260B)	SVOC (8270C)	SVOC by SIMS (8270C)	Pesticide (8081A)	PCBs (8082)	Total Metals (EPA 200.8)	Total Mercury (EPA 245.1)	Cyanide (SM 4500)	Dissolved Metals (EPA 200.8)	Dissolved Mercury (EPA 245.1)
20111205BW-MW-2V7N	12/5/2011	normal	J34358	Y							X			X
20111205BW-MW-3V11.5N	12/5/2011	normal	J34358	Y							X			
20111205BW-MW-4V12N	12/5/2011	normal	J34358	Y							X			
20111205BW-MW-5V12N	12/5/2011	normal	J34358	Y										
20111205BWMW-6V9.5N	12/5/2011	normal	J34358	Y							X			
20111205EBVV	12/5/2011	EB	J34358	N							X			
20111206BWMW-1V6.5N	12/6/2011	normal	J34435	Y							X			X
20111206BWMW-7V N	12/6/2011	normal	J34435	Y							X			
20111206BWMW-8V N	12/6/2011	normal	J34435	Y							X			X
20111206MW-11V8FD	12/6/2011	field dup	J34435	Y	X	X	X	X	X	X	X	X		X
20111206MW-11V8N	12/6/2011	normal	J34435	Y	X	X	X	X	X	X	X	X		X

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	SVOC (SW-846 8270C) and (SW846 8270C by SIMs)	Pesticide (SW-846 8081A)	PCB (SW-846 8082)	Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)
Data Completeness, Holding Times, Preservation, & Solids Percentage	Cooler temp < 4 ºC. Samples holding time requirement < 7 days (<14 days if HCL preserved). Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days. Solids percentage >50%.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 ºC. Samples extracted within < 7 days & analyzed within <40 days.	Cooler temp < 4 C. Holding Time Hg < 28 days, CN < 14 days, and all other metals < 180 days from collection.
System Monitoring Compounds	recoveries within limits (70 - 130%) or laboratory established limits	Recoveries for all samples within lab established limits or USEPA (2008) limits?	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	Surrogates TCMX & DCB recoveries within 30-150%. RT within windows established during initial 5-point analysis.	
Matrix Spike/Matrix Spike Duplicates	MS/MSD: 1 per 20 project samples. Recoveries within lab limits (or 70-130%). RPD <22%	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 50%.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-36.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	MS/MSD: 1 per 20 project samples or each preparation batch. Recoveries within lab limits. MS/MSD %RPDs <= 20%. Spike Recovery limits 75-125%
Lab Control Sample/Duplicate		Recoveries within lab limits (or 70-130%).	LCS/LCSD: 1 per 20 project samples. Recoveries within limits specified in Region 2 SOP HW-36.	LCS/LCSD: 1 per 20 project samples or each preparation batch. Recoveries within limits specified in SOP HW-37.	LCS/LCSD: 1 per 20 project samples or each preparation batch. LCS limits within 80-120%.
Blanks	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.	CC Blank Conc < 3xIDL. Method blanks: 1 per 20 project samples. No TCL or TICs detected in MB, TB, or EB.
GC/MS Instrument Performance Check	Performance check every 12 hours per instrument. Ion abundances normalized to m/z 95.	Instrument performance check analyzed for every 12 hrs per instrument. Ion abundances normalized to m/z 198.	Chromatogram baselines stable.	Chromatogram baselines stable.	
TCL Analytes	RRT within 0.06 RRT units of standard RRT in CV.4. Relative intensities of characteristic ions within ± 30% of reference MS.	RRT of TCL within 0.06 RRT units of standard RRT in CV. Relative intensities of characteristic ions within ± 30% of reference MS.	RTs of TCL within established RT windows for both columns. %D <25%.	RTs of identified PCBs within established RT windows for both columns. %D for positive sample results on two GC columns <25%.	
Tentatively Identified Compounds	No TCLs are listed as TIC. Ions in reference MS with relative intensity≥10% present in sample MS. TIC and "best match" standard relative ion intensities agree within ± 20%.	No TCLs are listed as TIC.Ions in reference MS with relative intensity ≥10%. TIC & "best match" standard relative ion intensities agree within ± 20%.	NA		

Appendix B
Table B
Summary of DAR Aqueous Criteria
Quarter 1 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

	VOC (SW-846 8260B) and SW846 8260B by SIMs	**SVOC (SW-846 8270C) and (SW846 8270C by SIMs)**	**Pesticide (SW-846 8081A)**	**PCB (SW-846 8082)**	**Metals (EPA 200.8) Total and Dissolved Cyanide (SM 4500 CN E)**
Reported Quantitation Limits	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	Quantitation limits adjusted to reflect sample dilutions and moisture.	
CRDL Standard					CRDL results btw 70-130%
GC/MS Initial Calibration	%RSD ≤ 20%. Average RRFs > 0.050.	%RSD ≤ 20%. Average RRFs > 0.050.	ICV performed at start of analytical sequence. %RSD ≤ 20%. RTs within established windows.	ICV performed at start of analytical sequence. %RSD ≤ 15% for 3 of 5 peaks. RTs within established windows.	r^2 $\geq$ 0.995 CCV every 10 samps or 2 hours ICV/CCV %R btw 90-110%
GC/MS Continuing Calibration	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed for every 12 hours per instrument. %D ≤ 20%. RRFs ≥ 0.05.	CV performed after every 10 samples & at end of each analytical sequence. %D ≤ 25%. RTs within windows established during initial calibration.	CV performed after every 10 samples & at end of each analytical sequence. %RSD ≤ 50% for 3 of the 5 peaks. RTs within windows established during initial calibration.	
Internal Standards	IS areas of samples & blank within (-50% to + 100%). RTs < 30 seconds.	IS areas within (-50% to + 100%). RTs of IS within 30 seconds.			
Duplicate	All % RPD ≤ 30%?	% RPD ≤ 30%.	% RPD ≤ 30%.	% RPD ≤ 30%.	RPD < 35% or Absolute Diff < 2 RL when samp/dup value < 5x RL
ICP Interference Check Sample (ICS)					ICS results within 80-120%.
Serial Dilution					Performed on samples of a similar matrix or 1 per 20 samples. %D ≤ 10% conc ≥ 25xDL (7470A/7471A) and 10x IDL (6010B) for 5-fold dilution.

RT = Retention Time
TCL = Target Compound List
%D = Percent Deviation
TIC = Tentatively Identified Compound
%RPD = Relative Percent Difference
%RSD = Percent Relative Standard Deviation
RRF = Relative Response Factor
CCV = Continuing Calibration Verification

Appendix B
Table C
Summary of Initial Calibration Issues
Quarterly Report 4
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Sample	Analysis Method	Reason	Action
J34435	all project samples	VOC (SW-846 8260B)	ICAL (Cal ID 13343, Instr. VOAMS3) run on 12/7/11 22:16 to 12/8/11 00:10. Average RRF was greater than or equal to 0.05 for all target compounds with the exception of 2-butanone (RRF=0.0265) and 1,4-dioxane (RRF=0.0027).	The nondetected 2-butanone and 1,4-dioxane sample results are considered unusable and qualified "R" for all samples.

Appendix B
Table D
Summary of Continuing Calibration Issues
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Sample	Analysis Method	Reason	Action
J34435	all project samples	VOC (SW-846 8260B)	CC (File ID c63425.d, Instr. VOAMS3) on 12/12/11 at 20:07. % D was within QC limits (20%) for all target compounds except for Bromomethane (-34%).	Qualify projects sample results for the above compounds as J.
J34435	all project samples	VOC (SW-846 8260B)	CC (File ID c63425.d, Instr. VOAMS3) on 12/12/11 at 20:07. Average RRF was greater than 0.05 for all target compounds except for 2-Butanone (0.0289) and 1,4-dioxane (RRF=0.0022).	Qualify projects sample 2-Butanone and 1,4-dioxane detects as J and non-detects as rejected (R).
J34435	all project samples	PCB (SW846 8082)	CC (Instr. PESTGC7) was conducted on 12/11/11 at 18:02. In CLP-2 column: %Ds were > 15% for 7 of the 8 Aroclor-1016 peaks; and all 8 Aroclor-1260 peaks. In CLP-1 column: %Ds were < 15% for 5 of the 8 Aroclor-1016 peaks (peak 6 %D -100%); and 7 of the 8 Aroclor-1260 peaks. All RTs were within the established windows except Arochlor-1016 peak 6 which had RT = 0. CC (Instr. PESTGC7) was conducted on 12/12/11 at 00:03. In CLP-2 column: %Ds were < 15% for all 8 Aroclor-1016 peaks; and 7 of the 8 Aroclor-1260 peaks. In CLP-1 column: %Ds were < 15% for 7 of the 8 Aroclor-1016 peaks; and all 8 Aroclor-1260 peaks.	Sample 20111206MW-11V8N was analyzed between CC 12/11 at 18:02 and CC 12/12 at 00:03. Validation qualifcation of this sample is not required based upon confirmation column analysis and average %D<15%.

Appendix B
Table E
Summary of CRDL Check
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J34435	The beginning CDRL (Lab Sample ID: CRI 460-96236/8) had recoveries were within lab limits and Region 2 limits except Na (68%) was below the Region 2 limit. The end CDRL (Lab Sample ID: CRI 460-96402/8) had recoveries were within lab limits and Region 2 limits except Be (132%) was above the Region 2 limit.	Metals (EPA 200.8) Total and Dissolved	All project samples.	No action was taken since all Na results were >2xCDRL and all Be results were non-detect.

Appendix B
Table F
Summary of Matrix Spike Issues
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J34435	A non-project sample was used for the MS/MSD for this SDG. All MS/MSD recoveries were within laboratory limits except the following: Cis-1,2-dichlorobenzene (57% MS), 2-Butanone (176% MS and RPD 57%), and 1,2,3-Trichlorobenzene (75% MSD).	VOA (SW846 8260B)	NA	Validation qualification is not required based upon spiked analysis of a non-project MS/MSD.
J34435	MS/MSD analyses were conducted on a non-project sample. All MS/MSD recoveries were within laboratory limits except 4-Nitroanline (123% MS, 124% MSD).	SVOC (SW846 8270C)	NA	Validation qualification is not required for project samples based upon MS/MSD analyses of a non-project sample.
J34435	MS/MSD analyses were conducted on a non-project sample. All MS and MSD recoveries were within laboratory limits except of the following: alpha-BHC (123% MS, 131% MSD), delta-BHC (125% MS, 130% MSD), gamma-BHC (126% MSD), 4,4-DDD (122% MSD), Dieldrin (113% MSD), Heptachlor Epoxide (123% MSD), and Methoxychlor (54% MS). RPDs were withing > 30% for all compounds except Methoxychlor (63.6% MS, 63.4% MSD).	Pesticides (SW846 8081A)	NA	Validation qualification of project samples is not required based upon non-project MS/MSD sample analyses.
J34435	MS/MSD analyses were conducted on a non-project sample. All recoveries were within lab limits except for Arcoclor-1260 (68% MS Lab File ID or180810.d). No TCLs were detected in project samples.	PCB (SW846 8082)	NA	Validation qualification of project samples is not required based upon non-project MS/MSD sample analyses.
J34435	A pre-digestion spike sample (non-project sample) was analyzed for total metals and dissolved As. The results were either within 75%-125% limits or the original concentrations were above 4 times the spiked concentrations for all analytes except Se (52%).	Metals (EPA 200.8) Total and Dissolved	NA	Validation qualification is not required for non-project MS/MSD sample analyses.

Appendix B
Table G
Summary of Field Duplicate Issues
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Noncompliance	Analysis Method	Sample Affected	Action
J34435	RPDs were within 30% except Pentachlorophenol (57%RPD).	SVOC (SW846 8270C by SIMs)	20111206MW-11V8FD and 20111206MW-11V8N	The pentachlorophenol results for the parent sample and its field duplicate are qualified "J".
J34435	RPDs were above 30% for alpha-BHC since it was detected in the field duplciate but not the parent sample.	Pesticides (SW846 8081A)	20111206MW-11V8FD and 20111206MW-11V8N	No action was taken.
J34435	A lab duplicate was not analyzed for this SDG. However, laboratory precision was evaluated during MS/MSD analyses.	Cyanide (SM 4500 CN E)	20111206MW-11V8FD and 20111206MW-11V8N	No action was taken.

Appendix B
Table H
Summary of TCL Analytes Issues
Quarter 4 Groundwater Sampling
Ventron/Velsicol Superfund Site OU-1
Wood-Ridge and Carlstadt, NJ

SDG	Analysis Method	Noncompliance	Action
J34435	Pesticides (SW846 8081A)	No pesticides were detected in any project samples except 20111206MW-11V8FD detected aplha-BHC (0.030 JP ug/L). Precision of alpha-BHC between columns was 53.2%RPD for this sample.	The alpha-BHC result is qualified "J" for this sample.

Appendix C – Air Quality Monitoring in Wolf Warehouse Memorandum

APPENDIX C-
TECHNICAL M E M O R A N D U M

October 15, 2011

To: Mr. Robert Casselberry

From: Chris Greene, Glenn Pacheco

Cc: Margaret Bazany, Ron Lantzy

Subject: August 30 to 31, 2011 Indoor Air Sampling for Mercury at Wolf Warehouse

Introduction

This memorandum presents the approach and results for the post-remediation annual summer season air sampling for mercury performed at the Wolf Warehouse in Wood-Ridge, New Jersey from August 30 to 31, 2011. This is the second sampling event subsequent to completion of intrusive remediation activities at the OU-1 Site in the summer of 2010, so consequently, no intrusive activities were taking place during the sampling period. The initial year of sampling included two rounds – one in the summer (completed in September 2008) and one in the winter (completed in February 2009). The first post-remediation sampling event was completed in September 2010. Both the initial and post-remediation air sampling was performed at the Wolf Warehouse building in accordance with the approved Undeveloped Area Remedial Action Workplan (RAW) for OU-1. One of the requirements of the approved Undeveloped Area RAW is to perform air monitoring at the Wolf Warehouse in accordance with selected remedy "Soil Alternative 4" (S4) as presented in the ROD. During the first year one set of samples was collected in the summer and one set was collected in the winter commencing in the summer of 2008 as requested by the NJDEP. Per the Undeveloped Area RAW, after the first year of sampling, the program will continue with follow-up sampling on an annual basis (i.e., a set of mercury samples will be collected every year). The results of the initial winter and summer monitoring were used to determine the time of year for the annual sampling. The summer season (September 2008) sampling results during the initial year as documented in two Technical Memorandums previously submitted dated October 31, 2008 and March 24, 2009. Last year, the annual sampling was performed on September 29-30, 2010 and the results presented a Technical Memorandum dated November 12, 2010.

The indoor air sampling for mercury at the Wolf Warehouse is being driven primarily by vapor intrusion concerns, therefore, the air sampling program was designed and implemented in accordance with applicable requirements of the *New Jersey Department of Environmental Protection Vapor Intrusion Guidance* (October 2005; updated Tables March 2007).

Sampling Event Procedures

An initial building survey was performed in conjunction with the September 2008 sampling event and was updated prior to the February 2009 winter sampling. At the time of these surveys, the building was occupied and operating as a bulk paper warehouse as well as containing a cardboard display assembly operation. Another building survey was performed in conjunction with the September 2010 sampling event because at that time the building had been vacated and its contents removed as part of the Developed Area RAW implemented in 2010. Although the building has remained unoccupied throughout 2011, another building survey was performed on August 30, 2011 prior to the current sampling event to document any conditions that needed to be accounted for during the air monitoring. Example conditions include opening or closing certain vents, windows or doors and/or whether the building's ventilation system was on/off. Information collected from the building surveys was used to develop the monitoring locations and the expected building conditions prior to and during the sampling. A completed survey form is contained in **Appendix A**.

The target compound for the indoor air sampling is total atmospheric mercury consisting of both gas-phase and particulate concentrations. The measured mercury levels were compared to the New Jersey indoor reference value for mercury of 300 nanograms per cubic meter (ng/m^3).

The mercury sampling methodology used was the *Frontier Geosciences Sorbent Total Mercury Method – Total Gaseous Mercury Capture on Iodated Carbon (FGS-009)*. This is a peer-reviewed method developed by Frontier Geosciences, Inc., an analytical laboratory that specializes in low-level mercury analysis. This method was used in previous sampling for mercury in and around the Wolf Warehouse. The method collects gas-phase and particulate-phase atmospheric mercury species by trapping on an iodated carbon matrix. After sampling, the mercury is leached off the iodated carbon using a hot-refluxing HNO_3/H_2SO_4 solution, followed by further oxidation using a BrCl solution. Aliquots of the digest are analyzed via *USEPA Method 1631 - Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry*.

Based on the prior sampling, the building survey, and weather conditions for the sampling period, four sampling locations were selected: three indoor locations and one outdoor. The sample locations are shown on a figure in Part IV of **Appendix A** and were named as follows:

NE-1 = northeast corner of building (adjacent to loading dock)
CN-2 and CN-D-3 = duplicate pair sampled in central location of warehouse
SW-4 = southwest corner of building (near stairs to door)
NW-O-5 = Outside sample collected near the northwest corner of building.

The outdoor sampling location, near the northwest corner of the building, was selected based on forecasted wind conditions at the time of sampling. This location was upwind of the building for the expected winds from the northwest during the sampling event. Meteorological data from Teterboro Airport and weather forecast information was obtained from the National Weather Service website the morning of the sampling event to determine the location for upwind ambient air sampling. Concurrent meteorological data during the 24-hour sampling period was obtained from nearby Teterboro Airport for aid in interpretation of sampling results. Graphs of the weather data are presented in **Appendix B**.

Sampling was started between 13:56 to 13:59 pm on August 30, 2011 and continued for 24 hours until August 31, 2011. The samples were collected in the breathing zone approximately four feet above ground/floor surfaces.

Indoor air quality (IAQ) measurements of temperature, relative humidity, and barometric pressure were performed at each of the four sampling locations. These measurements were made with a TSI Model No. 8554 IAQ meter.

Sample custody and documentation procedures were followed as described in the sampling method. The analytical holding time for this method is specified as "indefinite" once the sample has been collected and sealed on the sampling media. Samples were shipped by an overnight express service to the laboratory upon the completion of sampling.

Quality assurance (QA) for the sampling event consisted of pump flow calibrations, pump flow checks, and quality control (QC) samples. Sampling flow checks were performed immediately prior to, during, and after each sampling event. QC samples consisted of one field duplicate and a field blank, as well as laboratory QC samples, as prescribed by the method. QC samples were analyzed for total atmospheric mercury using the same methods as for the routine samples.

Building Survey Results

Prior to being vacated during the Developed Area Remedial Action in 2010, the Wolf Warehouse building at 3 Ethel Blvd was being used to store rolls of paper and operate a corrugated box and display manufacturing facility. The building dimensions are approximately 250 feet by 250 feet resulting in a total footprint area of 62,500 square feet. The building is situated such that the front is facing the northeast (along Ethel Blvd.). The southeast and southwest sides of the building form part of the border of the OU-1 Undeveloped Area in its northern portion.

The front of the building contains several loading dock bays for the delivery and pick-up of paper rolls. The back of the building has loading dock bays for delivery/pick-up by rail car. The building's outside walls are constructed of pre-fabricated concrete sections and the building sits on a solid concrete foundation three feet above grade.

The building was observed to be divided into two sections where previously different types of activities took place. The east side was previously used to store rolls of paper, while most of the west half was previously used to assemble cardboard display units and various types of display boxes. The back half of the west side previously contained a mix of box assembly supplies and paper rolls. At the time of the sampling in August 2011, the building was unoccupied (no employees) with all of its previous contents removed.

A general inspection of the floor did not identify major cracks in the floor that would act as pathways for vapor intrusion. At the back of the building, there were two sumps with stairs leading to doors that open at grade. The doors were observed not to form an air tight seal in the closed position. As a result, these doors are believed to be the most viable pathway for vapors from the outside or soil to migrate into the building and this was accounted for when determining the sampling locations.

Environmental conditions during the survey and sampling were found to be typical of a warehouse. The air temperature was generally close to or a few degrees below the levels found outside (outdoor temperatures generally ranged from the mid-60s to mid-80s ºF over the sampling period; 75 to 84 ºF during sampling QC checks). Based on observation, air movement in most of the building can be characterized as stagnant. Outside, winds started out from the northwest on August 30 before turning to the west and southwest later in the day, and becoming light and variable the morning of August 31. No rain occurred during the sampling period.

Given the vacant status of the building, the survey did not reveal any material or operation that would interfere with the mercury sampling.

Sampling Results and Recommendation

A summary of the air sampling results and IAQ measurements are presented in the table below. The laboratory results are presented in **Appendix C** and sampling data calculations are in **Appendix D**.

Sample Location	**Mercury Conc.**	**Avg. Temperature**	**Avg. Relative Humidity**	**Avg. Barometric Pressure**
Units:	(ng/m^3)	(F)	(%)	(mm Hg)
NE-1	53	80.9	49.4	766.7
CN-2	167	80.8	48.9	766.7
CN-D-3 (Duplicate)	180	80.8	48.9	766.7
SW-4	124	80.7	50.9	766.7
S-O-5 (Outdoor)	4	80.6	41.2	766.7
Indoor Averages	115	80.8	49.7	766.7
Field Blank	ND*	NA	NA	NA

ND = Not Detected; NA = Not Applicable
* Method Detection Limit (MDL) = 0.34 ng Hg/trap (approximately 0.047 ng/m^3)

The indoor mercury concentration results ranged from 53 to 167 ng/m^3, with an average of 115 ng/m^3 (not including duplicate), compared to a lower outside concentration of 4 ng/m3. These results are all below the New Jersey indoor reference value of 300 ng/m^3. The 2011 summer season indoor results are greater than both the first year post-remediation results (September 2010), which ranged from 82 to 90 ng/m^3 inside the building, and the September 2008 initial year summer results, which ranged from 31 to56 ng/m^3 inside the building. However, the August 2011 outdoor mercury concentration of 4 ng/m^3 is an order of magnitude lower compared to the outdoor concentrations of 40 ng/m^3 sampled last year and 91 ng/m^3 sampled in September 2008.

The duplicate pair sampled at the central location in the warehouse revealed mercury concentrations of 167 and 180 ng/m^3, a difference of 13 ng/m^3 (percent difference of 7.5 %).

A field blank mercury trap submitted for analysis revealed no detectable concentration of mercury.

Care must be taken in interpreting the results of a single indoor air quality sampling event. The samples are collected over a relatively short duration (24-hours) and represent only the conditions during that interval. Indoor pollutant concentrations can change rapidly due to changes in air movement, weather conditions or other physical movement in an area.

Attachments:
Figure 1 – Sampling Location Plan
Appendix A – Building Survey Form
Appendix B – Meteorological Data
Appendix C – Laboratory Sample results
Appendix D – Sampling Data Calculations

Appendix C-A – Building Survey Form

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jeff Detrick Date: ______

Preparer's affiliation: Parsons Phone #: (570) 977-6464

Site Name: V/V OU-1 Wolf Warehouse Case #: ______

Part I - Occupants

Building Address: 3 Ethel Blvd.

Property Contact: Joe Owner / Renter / other: PM

Contact's Phone: home ( ) ______ work ( ) ______ cell (201) 755 6119

# of Building occupants: Children under age 13 0 Children age 13-18 0 Adults 0

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial

Describe building: Square building approx. 300'x 300'x 40' Year constructed: 1975 (built)

Sensitive population: day care / nursing home / hospital / school / other (specify): None

Number of floors below grade: 0 (full basement / crawl space / slab on grade)

Number of floors at or above grade: 2

Depth of basement below grade surface: NA ft. Basement size: NA ft^2

Basement floor construction: concrete / dirt / floating / stone / other (specify): NA

Foundation walls: poured concrete / cinder blocks / stone / other (specify) ______

Basement sump present? *Yes* / *No* Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of ~~heating~~ system (circle all that apply):

~~hot air circulation~~	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard
other (specify): ______			

Type of ventilation system (circle all that apply):

central air conditioning	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify): ______		

Type of fu~~el utilized~~ (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / Propane

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / *No* NA

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) ____________

Existing subsurface depressurization (radon) system in place? *Yes / No* *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes / No*
Type of barrier: ____________________

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Adjacent to a remediated Hg site (V/V OU-1)

Other stationary sources nearby (gas stations, emission stacks, etc.): Boiler and process stacks located 0.25 miles East and 0.50 miles South

Heavy vehicular traffic nearby (or other mobile sources): Route 17 approximately 0.50 miles west. Truck traffic adjacent to building. Loading docks. Railroad tracks to the NE of building.

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		NA
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		NA
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		NA

* building was vacant / cleaned out of all supplies

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / No* How often? ______

Last time someone smoked in the building? ______ hours */ days ago*

Does the building have an attached garage directly connected to living space? *Yes / No*

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / No* NA

If yes, what types of solvents are used? NA

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes / No*

If so, when and which chemicals? ______

Has there ever been a fire in the building? *Yes / No* If yes, when? ______

Has painting or staining been done in the building in the last 6 months? *Yes / No*

If yes, when ______ and where? ______

Part VI – Sampling Information

Sample Technician: Jeff Detrick Phone number: (570) 977 - 6464

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: Tedlar bag / Sorbent / Stainless Steel Canister / Other (specify): ______

Analytical Method: TO-15 / TO-17 / other: FGS-009 Cert. Laboratory: Frontier

Sample locations (floor, room):

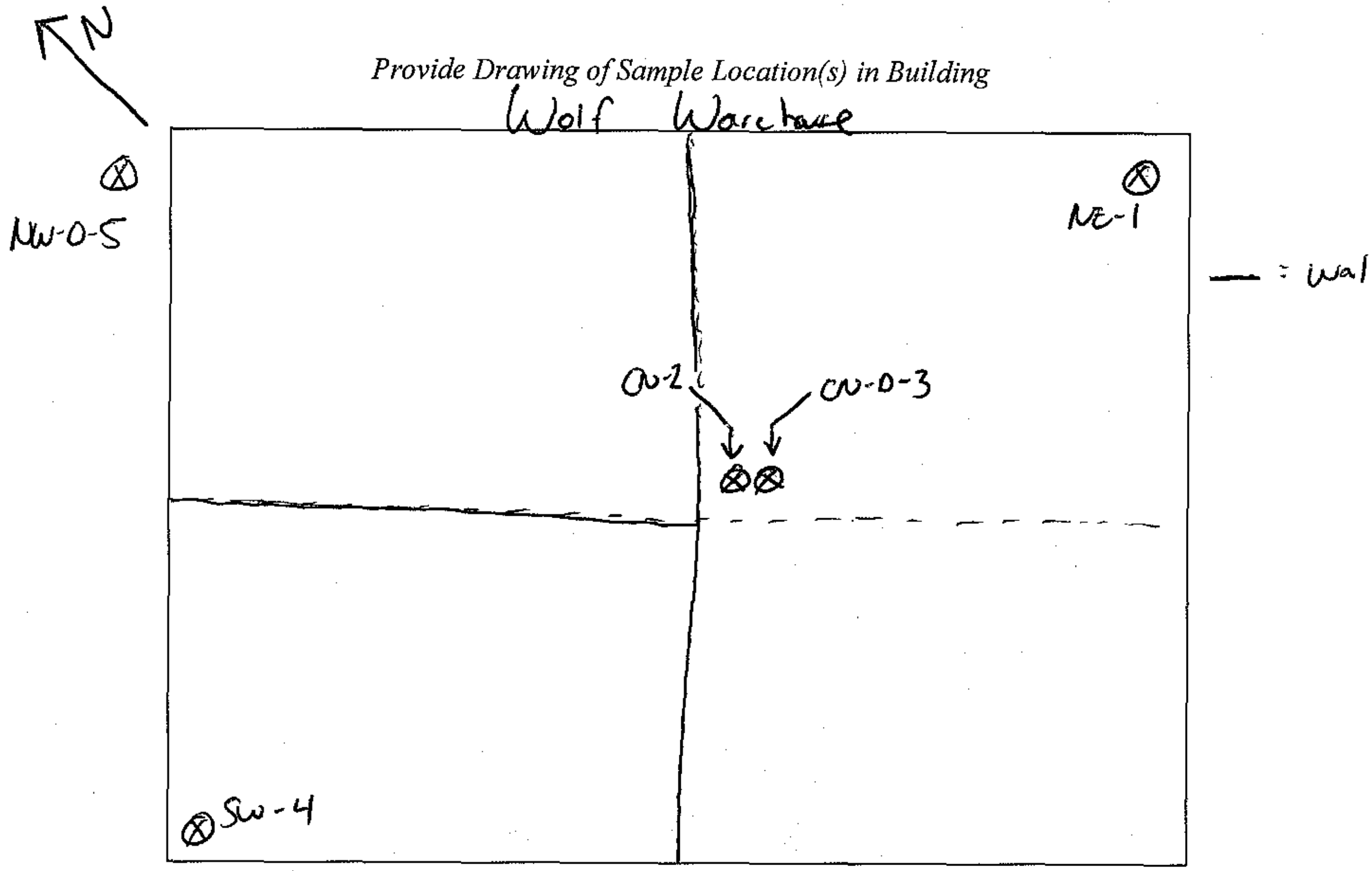
Field ID # NE - 1 Field ID # CN - 2 / CN-D-3

Field ID # SW - 4 Field ID # ~~[illegible]~~ NW O - 5

Were "Instructions for Occupants" followed? *Yes / No*

If not, describe modifications: ______

Provide Drawing of Sample Location(s) in Building



Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes* / *No*

Describe the general weather conditions: NW wind from 5-10 mph.
Sunny / Clear, Lower 80's.

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

No additional pertinent information.

(NJDEP 1997; NHDES 1998; VDOH 1993; MassDEP 2002; NYSDOH 2005; CalEPA 2005)

Appendix C-B – Meteorological Data

History for Teterboro, NJ

Tuesday, August 30, 2011 — View Current Conditions

Tuesday, August 30, 2011

« Previous Day | August | 30 | 2011 | View | Next Day »

Daily Weekly Monthly Custom

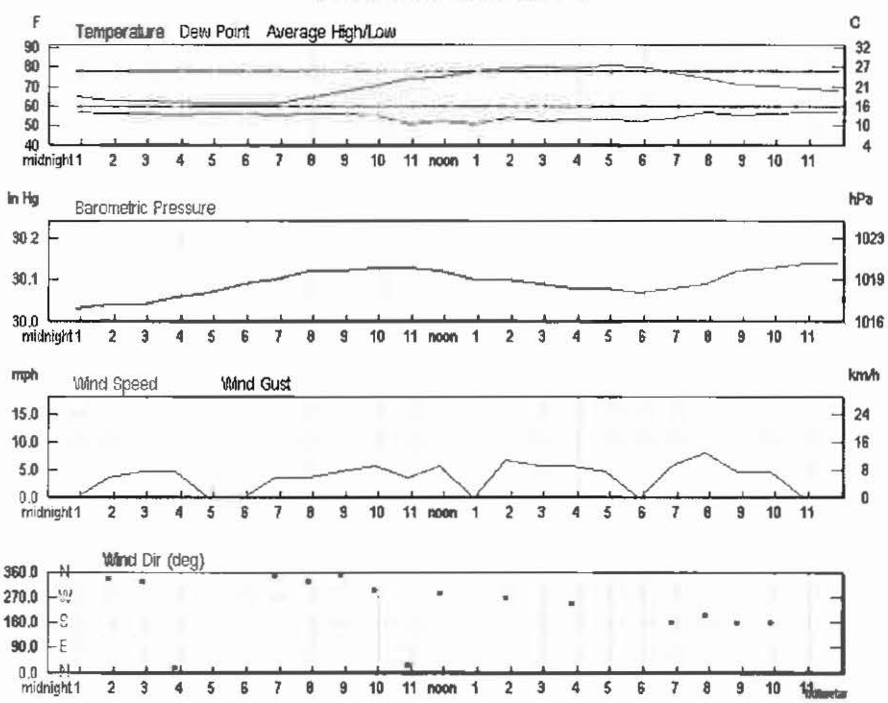
	Actual	Average	Record
	Temperature		
Mean Temperature	72 °F	-	
Max Temperature	82 °F	79 °F	93 °F (1991)
Min Temperature	62 °F	61 °F	57 °F (1999)
Cooling Degree Days	7		
Growing Degree Days	22 (Base 50)		
	Moisture		
Dew Point	56 °F		
Average Humidity	60		
Maximum Humidity	84		
Minimum Humidity	38		
	Precipitation		
Precipitation	0.00 in	-	- ()
	Sea Level Pressure		
Sea Level Pressure	30.09 in		
	Wind		
Wind Speed	3 mph (WNW)		
Max Wind Speed	8 mph		
Max Gust Speed	-		
Visibility	10 miles		
Events			

Averages and records for this station are not official NWS values.
Click here for data from the nearest station with official NWS data (KNYC).

T = Trace of Precipitation, **MM** = Missing Value

Source: NWS Daily Summary

Seasonal Weather Averages



Certify This Report

Hourly Observations

Time (EDT)	Temp.	Heat Index	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
12:51 AM	66.0 °F	-	57.9 °F	75%	30.03 in	10.0 mi	Calm	Calm	-	N/A		Clear
1:51 AM	64.0 °F	-	57.0 °F	78%	30.04 in	10.0 mi	NNW	3.5 mph	-	N/A		Clear
2:51 AM	64.0 °F	-	57.0 °F	78%	30.04 in	10.0 mi	NNW	4.6 mph	-	N/A		Clear
3:51 AM	63.0 °F	-	55.9 °F	78%	30.08 in	10.0 mi	NNE	4.6 mph	-	N/A		Clear
4:51 AM	62.1 °F	-	57.0 °F	84%	30.07 in	10.0 mi	Calm	Calm	-	N/A		Clear
5:51 AM	62.1 °F	-	57.0 °F	84%	30.09 in	10.0 mi	Calm	Calm	-	N/A		Clear
6:51 AM	62.1 °F	-	55.9 °F	80%	30.10 in	10.0 mi	North	3.5 mph	-	N/A		Clear
7:51 AM	64.9 °F	-	57.0 °F	75%	30.12 in	10.0 mi	NNW	3.5 mph	-	N/A		Clear
8:51 AM	68.0 °F	-	57.0 °F	68%	30.12 in	10.0 mi	North	4.6 mph	-	N/A		Clear
9:51 AM	71.1 °F	-	55.9 °F	59%	30.13 in	10.0 mi	WNW	5.8 mph	-	N/A		Clear
10:51 AM	75.0 °F	-	52.0 °F	44%	30.13 in	10.0 mi	NNE	3.5 mph	-	N/A		Clear
11:51 AM	75.9 °F	-	53.1 °F	45%	30.12 in	10.0 mi	WNW	5.8 mph	-	N/A		Clear
12:51 PM	78.8 °F	-	51.8 °F	39%	30.10 in	10.0 mi	Calm	Calm	-	N/A		Clear
1:51 PM	80.1 °F	80.1 °F	55.0 °F	42%	30.10 in	10.0 mi	West	6.9 mph	-	N/A		Clear
2:51 PM	81.0 °F	80.4 °F	53.1 °F	38%	30.09 in	10.0 mi	Variable	5.8 mph	-	N/A		Clear
3:51 PM	80.1 °F	80.0 °F	54.0 °F	40%	30.08 in	10.0 mi	WSW	5.8 mph	-	N/A		Scattered Clouds
4:51 PM	82.0 °F	81.3 °F	54.0 °F	38%	30.08 in	10.0 mi	Variable	4.6 mph	-	N/A		Clear
5:51 PM	81.0 °F	80.4 °F	53.1 °F	38%	30.07 in	10.0 mi	Calm	Calm	-	N/A		Clear
6:51 PM	78.1 °F	-	55.0 °F	45%	30.08 in	10.0 mi	South	5.8 mph	-	N/A		Clear
7:51 PM	75.0 °F	-	57.9 °F	55%	30.09 in	10.0 mi	SSW	8.1 mph	-	N/A		Clear
8:51 PM	72.0 °F	-	55.9 °F	57%	30.12 in	10.0 mi	South	4.6 mph	-	N/A		Clear
9:51 PM	71.1 °F	-	57.0 °F	61%	30.13 in	10.0 mi	South	4.6 mph	-	N/A		Clear
10:51 PM	70.0 °F	-	57.9 °F	65%	30.14 in	10.0 mi	Calm	Calm	-	N/A		Clear
11:51 PM	69.1 °F	-	57.9 °F	68%	30.14 in	10.0 mi	Calm	Calm	-	N/A		Clear

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History for Teterboro, NJ

Wednesday, August 31, 2011 — View Current Conditions

Wednesday, August 31, 2011

« Previous Day August 31 2011 View Next Day »

Daily Weekly Monthly Custom

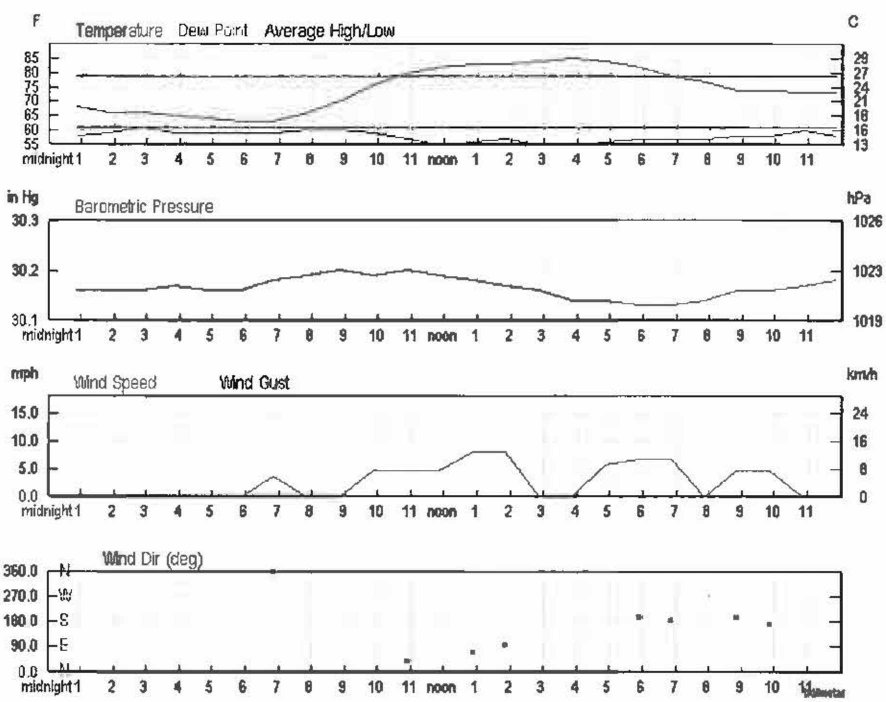
	Actual	Average	Record
	Temperature		
Mean Temperature	74 °F	-	
Max Temperature	86 °F	79 °F	95 °F (2010)
Min Temperature	63 °F	61 °F	59 °F (1996)
Cooling Degree Days	8		
Growing Degree Days	24 (Base 50)		
	Moisture		
Dew Point	58 °F		
Average Humidity	60		
Maximum Humidity	87		
Minimum Humidity	36		
	Precipitation		
Precipitation	0.00 in	-	- ()
	Sea Level Pressure		
Sea Level Pressure	30.17 in		
	Wind		
Wind Speed	2 mph (SE)		
Max Wind Speed	8 mph		
Max Gust Speed	-		
Visibility	10 miles		
Events	Fog		

Averages and records for this station are not official NWS values.
Click here for data from the nearest station with official NWS data (KNYC).

T = Trace of Precipitation, MM = Missing Value

Source: NWS Daily Summary

Seasonal Weather Averages



Certify This Report

Hourly Observations

Time (EDT)	Temp.	Heat Index	Dew Point	Humidity	Pressure	Visibility	Wind Dir	Wind Speed	Gust Speed	Precip	Events	Conditions
12:51 AM	68.0 °F	-	57.9 °F	70%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
1:51 AM	66.0 °F	-	59.0 °F	78%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
2:51 AM	66.2 °F	-	60.8 °F	83%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
3:51 AM	64.9 °F	-	59.0 °F	81%	30.17 in	10.0 mi	Calm	Calm	-	N/A		Clear
4:51 AM	64.0 °F	-	59.0 °F	84%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
5:51 AM	63.0 °F	-	59.0 °F	87%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
6:51 AM	63.0 °F	-	59.0 °F	87%	30.18 in	10.0 mi	North	3.5 mph	-	N/A	Fog	Shallow Fog
7:51 AM	66.0 °F	-	60.1 °F	81%	30.19 in	10.0 mi	Calm	Calm	-	N/A		Clear
8:51 AM	70.0 °F	-	60.1 °F	71%	30.20 in	10.0 mi	Calm	Calm	-	N/A		Clear
9:51 AM	75.9 °F	-	59.0 °F	56%	30.19 in	10.0 mi	Variable	4.6 mph	-	N/A		Clear
10:51 AM	80.1 °F	80.4 °F	57.0 °F	45%	30.20 in	10.0 mi	NE	4.6 mph	-	N/A		Clear
11:51 AM	82.0 °F	81.4 °F	55.0 °F	39%	30.19 in	10.0 mi	Variable	4.6 mph	-	N/A		Clear
12:51 PM	82.9 °F	82.1 °F	55.9 °F	39%	30.18 in	10.0 mi	ENE	8.1 mph	-	N/A		Clear
1:51 PM	82.9 °F	82.4 °F	57.0 °F	41%	30.17 in	10.0 mi	East	8.1 mph	-	N/A		Clear
2:51 PM	84.0 °F	82.9 °F	55.0 °F	37%	30.16 in	10.0 mi	Calm	Calm	-	N/A		Clear
3:51 PM	84.9 °F	83.6 °F	55.0 °F	36%	30.14 in	10.0 mi	Calm	Calm	-	N/A		Clear
4:51 PM	84.0 °F	83.0 °F	55.9 °F	38%	30.14 in	10.0 mi	Variable	5.8 mph	-	N/A		Clear
5:51 PM	82.0 °F	81.7 °F	57.0 °F	42%	30.13 in	10.0 mi	SSW	6.9 mph	-	N/A		Clear
6:51 PM	79.0 °F	-	57.0 °F	47%	30.13 in	10.0 mi	South	6.9 mph	-	N/A		Clear
7:51 PM	77.0 °F	-	57.0 °F	50%	30.14 in	10.0 mi	Calm	Calm	-	N/A		Clear
8:51 PM	73.9 °F	-	57.9 °F	57%	30.16 in	10.0 mi	SSW	4.6 mph	-	0.00 in		Clear
9:51 PM	73.9 °F	-	57.9 °F	57%	30.16 in	10.0 mi	South	4.6 mph	-	N/A		Clear
10:51 PM	73.0 °F	-	60.1 °F	64%	30.17 in	10.0 mi	Calm	Calm	-	N/A		Clear
11:51 PM	73.0 °F	-	57.9 °F	59%	30.18 in	10.0 mi	Calm	Calm	-	N/A		Clear

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Appendix C-C – Laboratory Sample Results

Mr. Glenn Pacheco **Project Name:**
Parsons
Results: Total Atm. Hg In Ambient Air via Frontier Solid Sorbent Method
Ryan Nelson - Frontier Global Sciences Inc. - 9/15/11

TABLE 1: Total Atmospheric Mercury (Incident Particulate Bound and Gas Phase Hg) FSTM A

Lab Sample ID	Field Sample ID	A Trap ng/trap	Estimated Sample Volume (Liters)	Estimated Blank Corrected Concentration (µg/m³)
1109014-01	NE-1	366.0 ng	**6937**	**0.053**
1109014-02	CN-2	1060.0 ng	**6506**	**0.167**
1109014-03	CN-D-3	1240.0 ng	**6903**	**0.180**
1109014-04	SW-4	914.0 ng	**7398**	**0.124**
1109014-05	NW-0-5	25.2 ng	**7217**	**0.004**
1109014-06	TB083111	0.4 ng	**NA**	**NA**

TABLE 2: Total Atmospheric Mercury (Gas Phase Hg) FSTM B

Lab Sample ID	Field Sample ID	B Trap ng/trap	Breakthrough % (FSTM B / FSTM A)
1109014-01	NE-1	1.7 ng	0.5%
1109014-02	CN-2	29.8 ng	2.8%
1109014-03	CN-D-3	5.7 ng	0.5%
1109014-04	SW-4	6.7 ng	0.7%
1109014-05	NW-0-5	0.8 ng	3.2%
1109014-06	TB083111	0.3 ng	NA

Mr. Glenn Pacheco **Project Name:**
Parsons
Results: Total Atm. Hg In Ambient Air via Frontier Solid Sorbent Method
Ryan Nelson - Frontier Global Sciences Inc. - 9/15/11

TABLE 3: Frontier Ambient Air Hg Preparation Method Blanks

Lab Prep Blank ID	ng Hg/Trap
F109038-BLK1	0.15 ng
F109038-BLK2	0.24 ng
F109038-BLK3	0.47 ng
Average >	**0.287 ng**
Standard Deviation >	**0.165 ng**
Relative Standard Deviation >	**57.6%**
Minimum Detection Limit >	**0.34 ng**
Minimum Reporting Limit >	**2.0 ng**

TABLE 4: Initial Calibration Verification - Secondary Standard

QC Parameter	Observed Value (ng/L)	True Value (ng/L)	SRM % Recovery	QA/QC Range
1I12001-ICV1	5.20 ng/L	5.00 ng/L	**104.0%**	**80%-120%**

TABLE 5: Analytical Spike Recovery

Lab Sample ID	Measured (ng/trap)	Net Measured (ng/Trap)	Expected (ng/Trap)	% Recovery	QA/QC Range	RPD
F109038-MS1	15.5 ng	9.5 ng	10 ng	**95.5%**	**75% - 125%**	
F109038-MSD1	15.7 ng	9.8 ng	10 ng	**97.6%**	**75% - 125%**	**1.35%**

Mr. Glenn Pacheco **Project Name:**

Parsons

Results: Total Atm. Hg In Ambient Air via Frontier Solid Sorbent Method

Ryan Nelson - Frontier Global Sciences Inc. - 9/15/11

TABLE 6: Lab Replicate Results

Lab Sample ID	Replicate#1 (ng/Trap)	Replicate#2 (ng/Trap)	RPD	QA/QC Range
F109038-DUP1	6.0 ng	5.8 ng	**2.5%**	**< 25%**

TABLE 7: Lab Control Spike Recovery

Lab Sample ID	Measured (ng/trap)	Expected (ng/Trap)	% Recovery	QA/QC Range
F109038-BS1	20.3 ng	25 ng	**81.4%**	**75% - 125%**
F109038-BSD1	24.8 ng	25 ng	**99.0%**	**75% - 125%**

TABLE 8: Initial Calibration Blank (ICB) and Continued Calibration Blanks (CCBs)

CCB ID	ICB/CCB (ng Hg/Blank)	QA/QC Acceptance
1I12001-IBL1	0.00 ng/L	**< 0.5**
1I12001-IBL2	0.00 ng/L	**< 0.5**
1I12001-IBL3	0.00 ng/L	**< 0.5**
1I12001-IBL4	0.00 ng/L	**< 0.5**
1I12001-CCB1	0.04 ng/L	**< 0.5**
1I12001-CCB2	0.04 ng/L	**< 0.5**
1I12001-CCB3	0.07 ng/L	**< 0.5**
1I12001-CCB4	0.08 ng/L	**< 0.5**
1I12001-CCB5	0.06 ng/L	**< 0.5**

Mr. Glenn Pacheco **Project Name:**
Parsons
Results: Total Atm. Hg In Ambient Air via Frontier Solid Sorbent Method
Ryan Nelson - Frontier Global Sciences Inc. - 9/15/11

TABLE 9: Continued Calibration Verification (CCVs) - Primary Standard

CCV ID	Measured	True Value	% Rec.	QA/QC Acceptance
1I12001-CCV1	19.96 ng/L	20.0 ng/L	**99.8%**	**80% - 120%**
1I12001-CCV2	20.68 ng/L	20.0 ng/L	**103.4%**	**80% - 120%**
1I12001-CCV3	20.24 ng/L	20.0 ng/L	**101.2%**	**80% - 120%**
1I12001-CCV4	20.20 ng/L	20.0 ng/L	**101.0%**	**80% - 120%**
1I12001-CCV5	4.67 ng/L	5.0 ng/L	**93.4%**	**80% - 120%**

Appendix C-D – Field Sampling Data and Calculations

Ventron/Velsicol Superfund Site OU-1
Wood-Ridge/Carlstadt, New Jersey
Wolf Warehouse Air Sampling
Field Data Calculations from August 30 - 31, 2011 Sampling Event

	Start		End			Start			End		Average	Sample
	Date	Time	Date	Time	Sample Time (Min)	**Flow**	**Flow-2**	**Flow-3**	**Flow**		**Flow (Lpm)**	**Volume (Liters)**
NE-1	8/30/2011	13:56	8/31/2011	13:58	1442	5.098	4.725	4.659	4.760		4.811	6936.7
CN-2	8/30/2011	13:57	8/31/2011	14:01	1444	5.054	4.332	4.36	4.277		4.506	6506.3
CN-D-3	8/30/2011	13:57	8/31/2011	14:01	1444	5.062	4.817	4.606	4.637		4.781	6903.0
SW-4	8/30/2011	13:58	8/31/2011	14:06	1448	5.067	5.099	5.130	5.140		5.109	7397.8
NW-O-5	8/30/2011	13:59	8/31/2011	14:09	1450	5.048	4.892	4.960	5.010		4.978	7217.4
Field Blank	8/30/2011	NA	8/31/2011	NA	NA	NA	NA	NA	NA		NA	NA
	Date	Time	Date	Time	Time (Min)	**Temp**	**Temp-2**	**Temp-3**	**Temp**		**Temp (F)**	
NE-1	8/30/2011	13:56	8/31/2011	13:58	1442	82.2	77.5	80.5	83.5		80.9	
CN-2	8/30/2011	13:57	8/31/2011	14:01	1444	82.4	77.2	80.7	82.9		80.8	
CN-D-3	8/30/2011	13:57	8/31/2011	14:01	1444	82.4	77.2	80.7	82.9		80.8	
SW-4	8/30/2011	13:58	8/31/2011	14:06	1448	82.7	76.8	80.1	83.2		80.7	
NW-O-5	8/30/2011	13:59	8/31/2011	14:09	1450	82.9	75.2	80.0	84.2		80.6	
Field Blank	8/30/2011	NA	8/31/2011	NA	NA	NA	NA	NA	NA		NA	
	Date	Time	Date	Time	Time (Min)	**RH**	**RH-2**	**RH-3**	**RH**		**RH (%)**	
NE-1	8/30/2011	13:56	8/31/2011	13:58	1442	45.2	57.1	51.1	44.3		49.4	
CN-2	8/30/2011	13:57	8/31/2011	14:01	1444	41.4	57.9	51.3	44.8		48.9	
CN-D-3	8/30/2011	13:57	8/31/2011	14:01	1444	41.4	57.9	51.3	44.8		48.9	
SW-4	8/30/2011	13:58	8/31/2011	14:06	1448	44.1	58.8	54.1	46.5		50.9	
NW-O-5	8/30/2011	13:59	8/31/2011	14:09	1450	31.6	55.9	41	36.3		41.2	
Field Blank	8/30/2011	NA	8/31/2011	NA	NA	NA	NA	NA	NA		NA	
Barometric Pressure Readings (mmHg):						765.5	765.5	767.8	767.8		766.7	

Appendix D – Vertical Barrier Wall Effectiveness Evaluation Figures

Figure D1 - Vertical Barrier Wall Mercury Analysis Western Alignment (BM-MW-7 to BM-MW-8)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

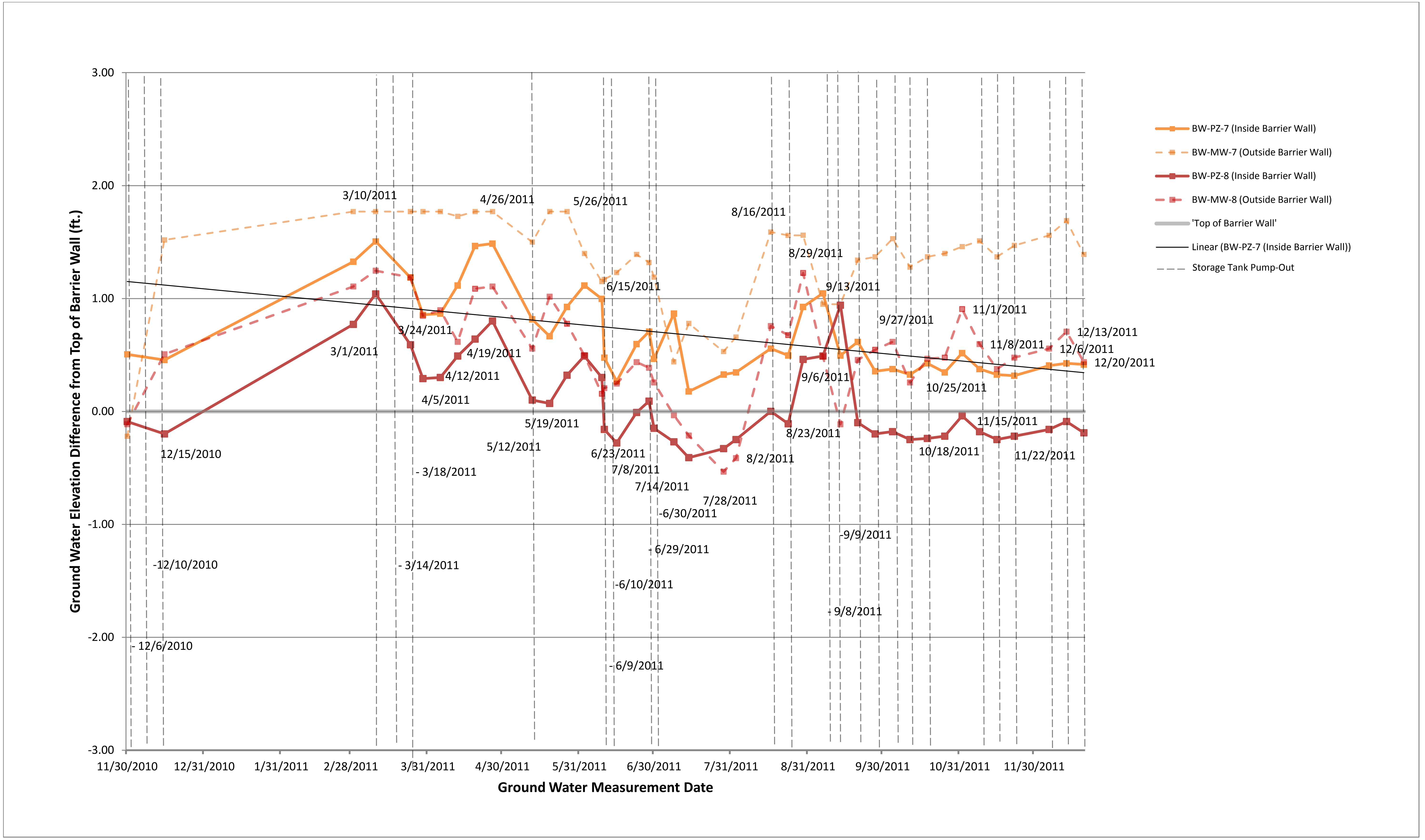


Figure D2 - Vertical Barrier Wall Mercury Analysis Northwest Alignment (BM-MW-8 to BM-MW-1)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

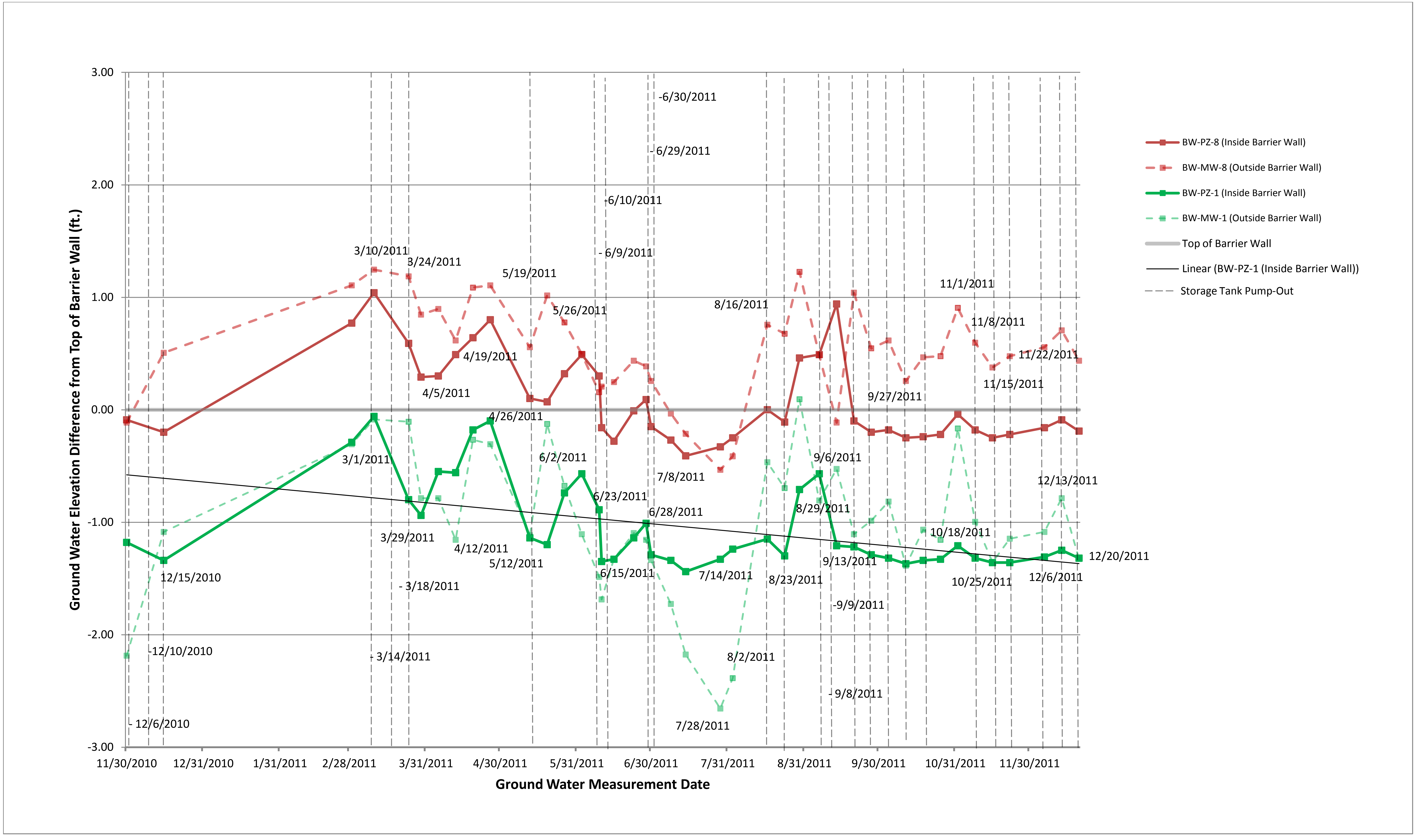


Figure D3 - Vertical Barrier Wall Mercury Analysis Northern Alignment (BM-MW-1 to BM-MW-2)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

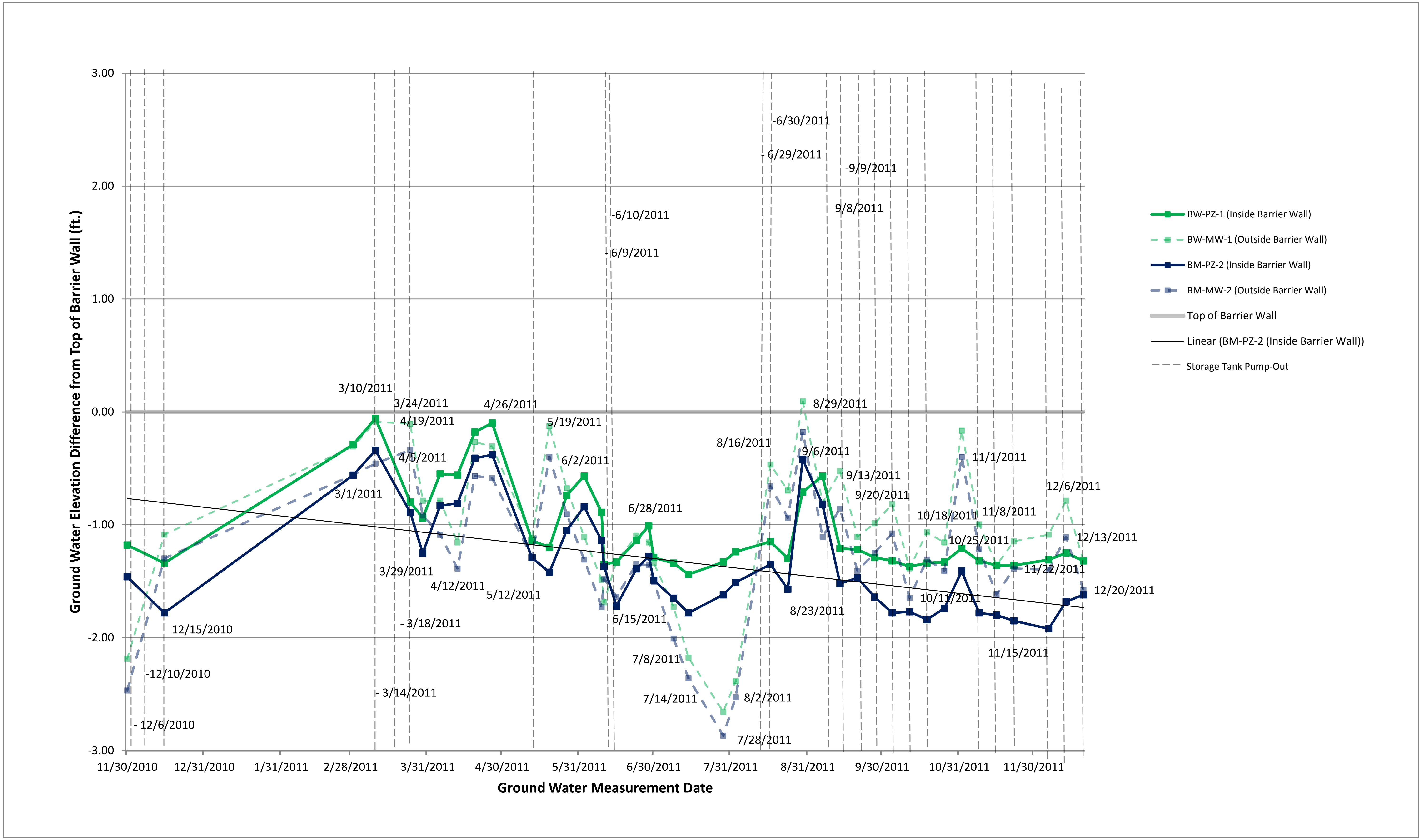


Figure D4 - Vertical Barrier Wall Mercury Analysis Northeast Alignment (BM-MW-2 to BM-MW-3)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

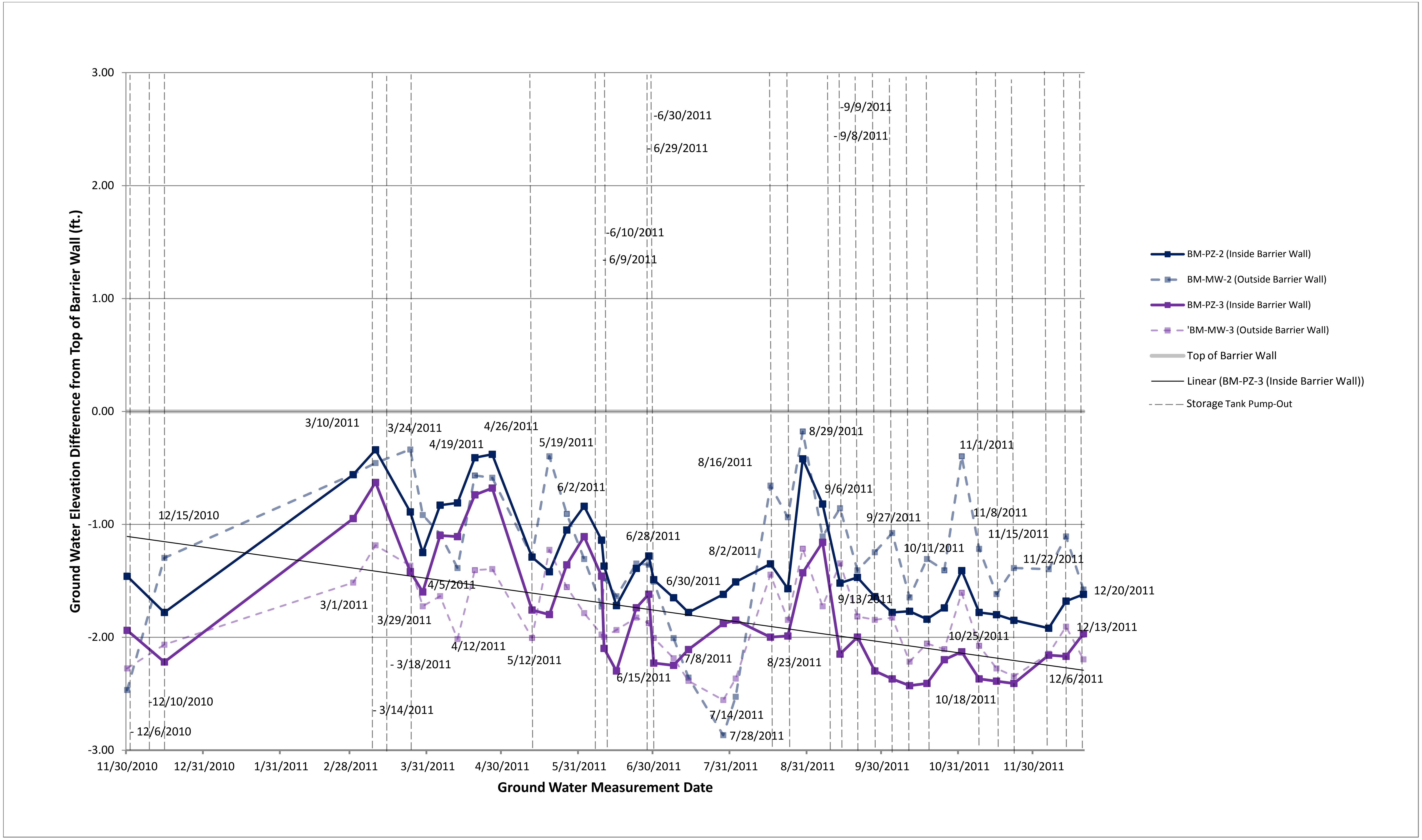


Figure D5 - Vertical Barrier Wall Mercury Analysis Eastern Alignment (BM-MW-3 to BM-MW-4)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

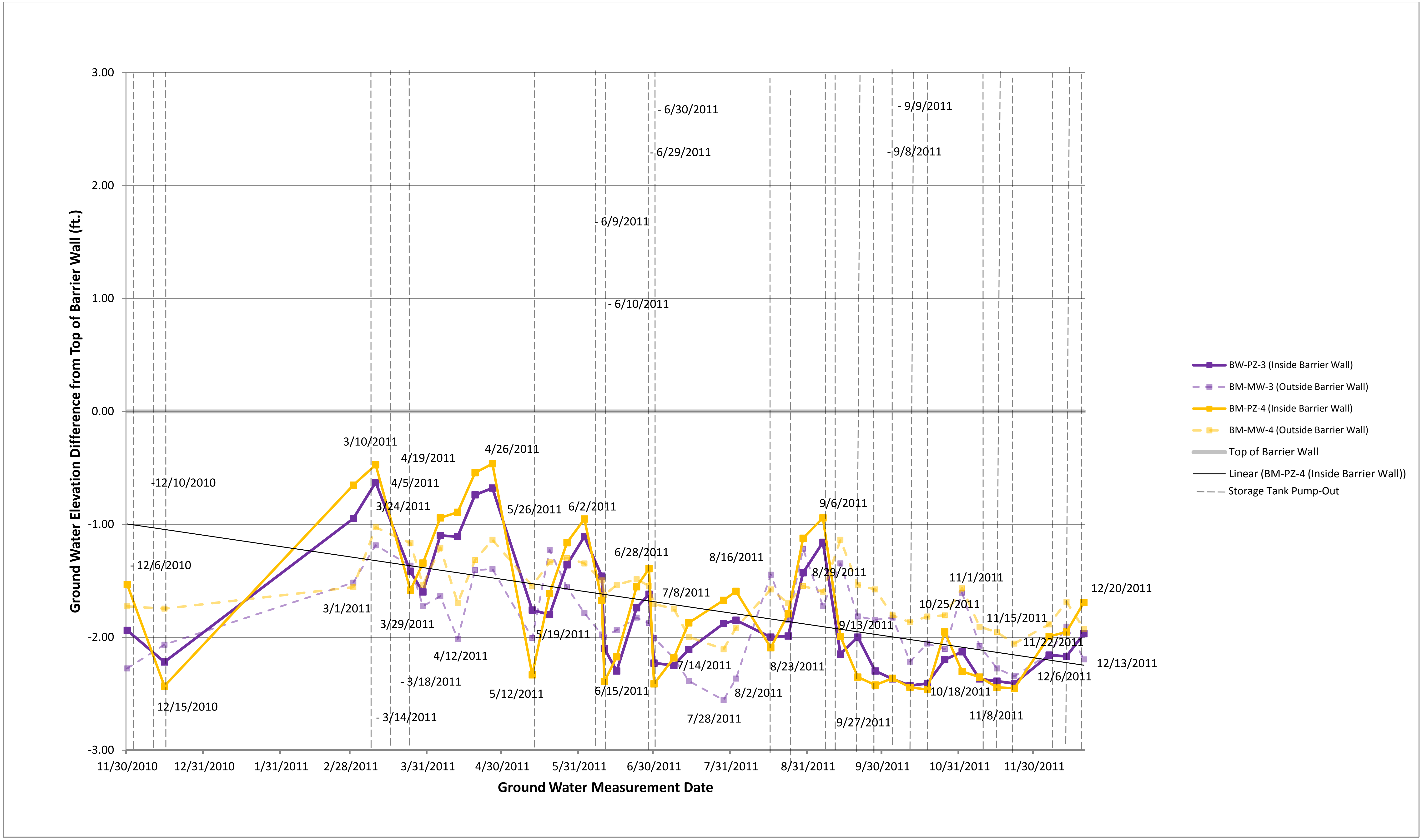


Figure D6 - Vertical Barrier Wall Mercury Analysis Southeast Alignment (BM-MW-4 to BM-MW-5)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

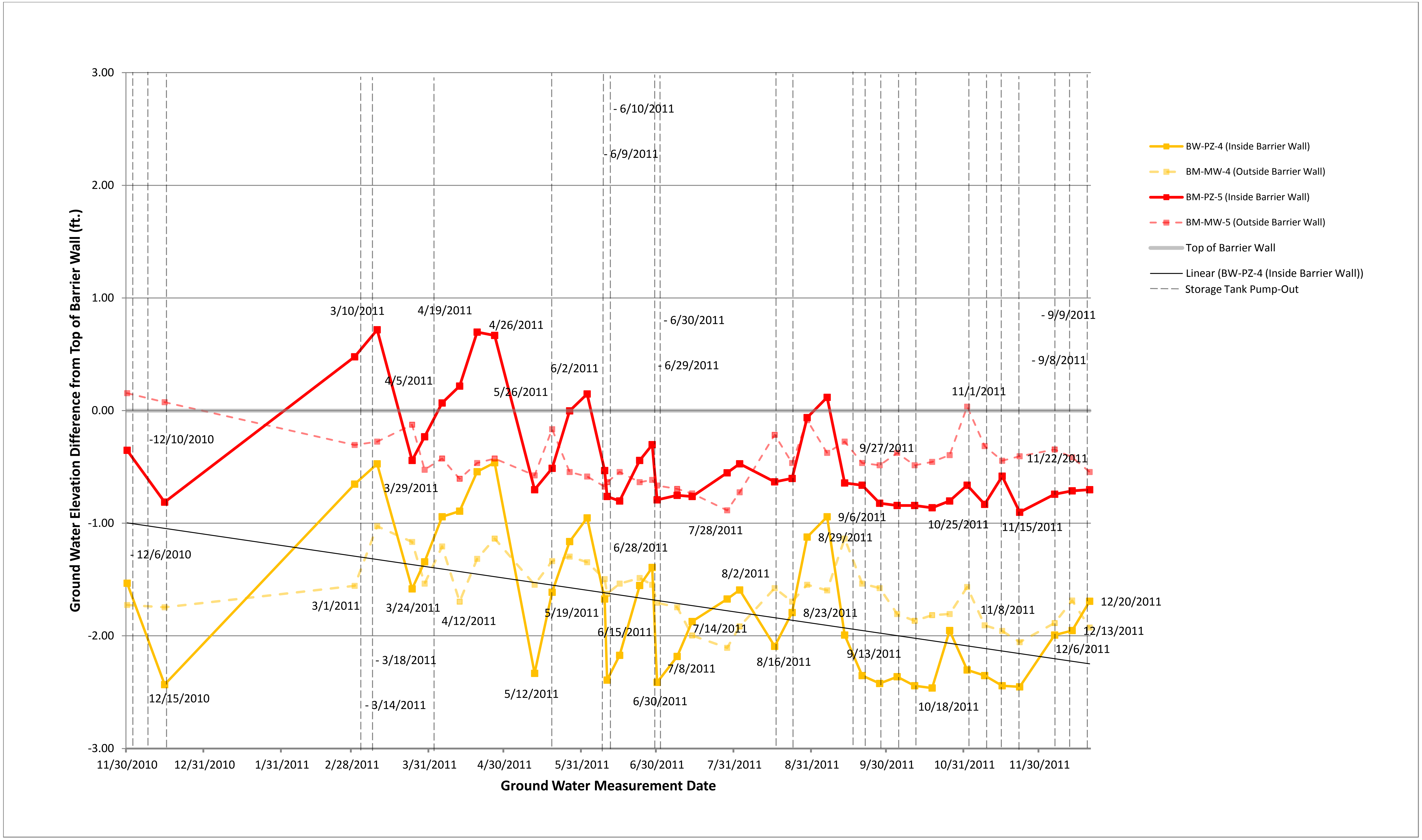


Figure D7 - Vertical Barrier Wall Mercury Analysis Southern Alignment (BM-MW-5 to BM-MW-6)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ

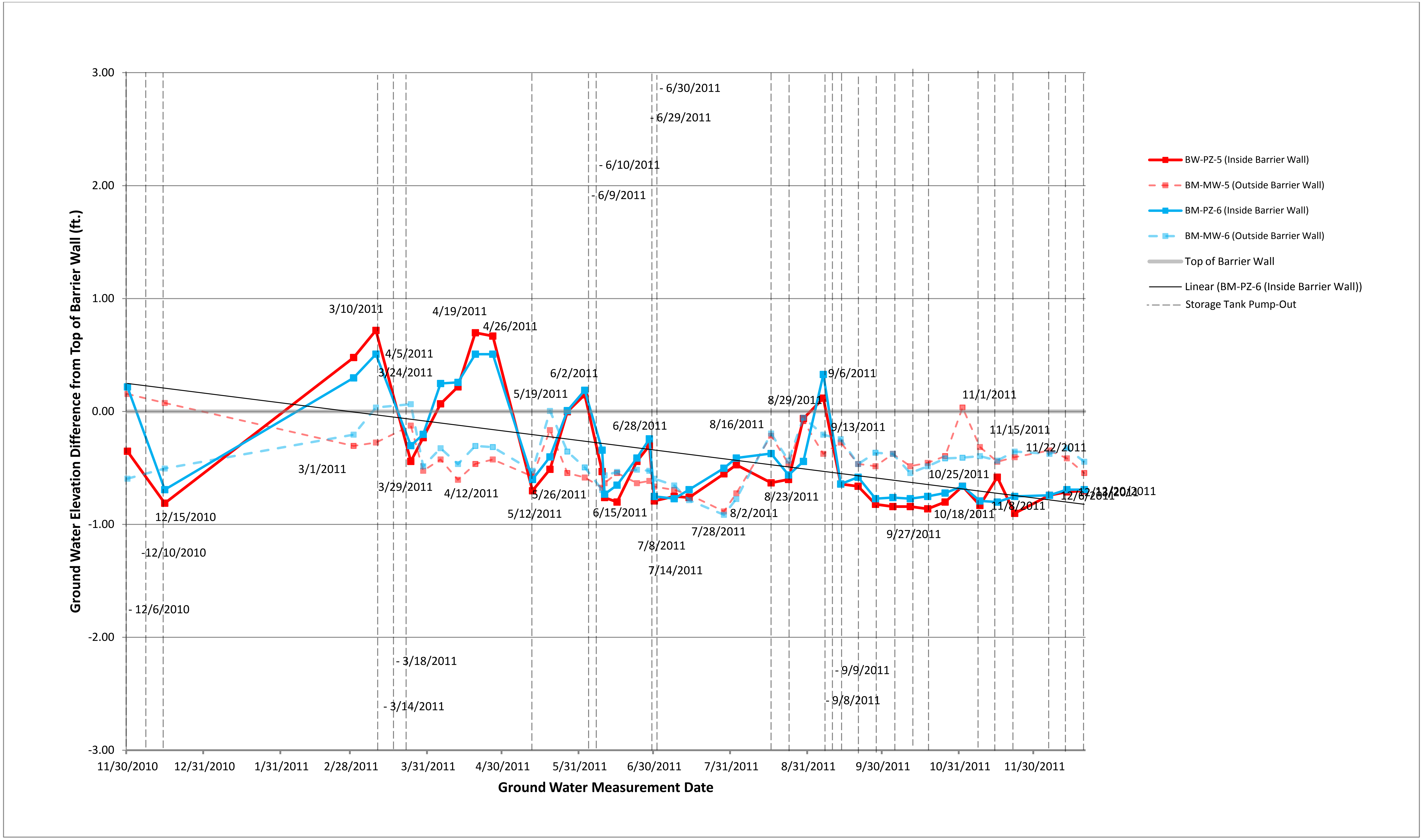
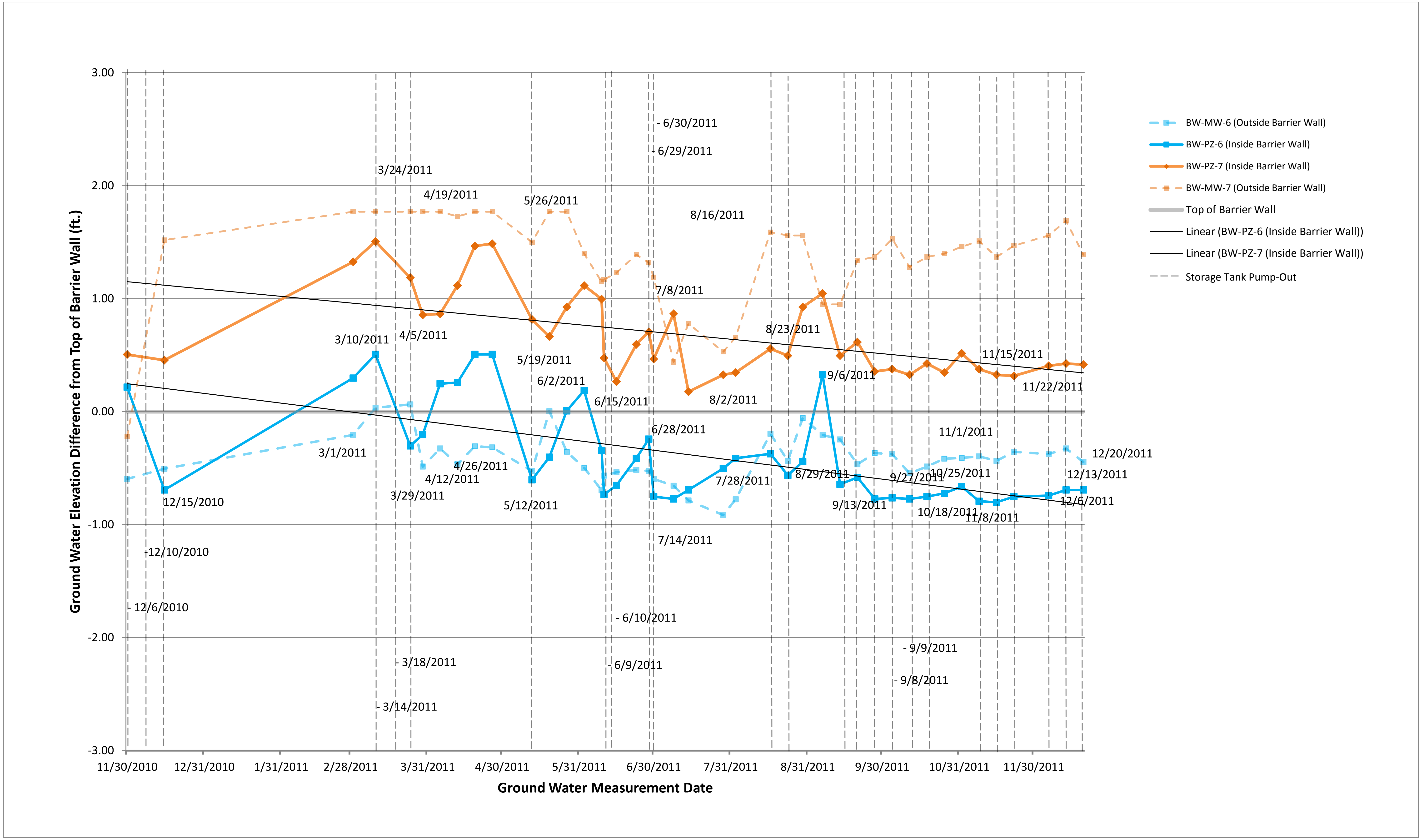


Figure D8 - Vertical Barrier Wall Mercury Analysis Southwest Alignment (BM-MW-6 to BM-MW-7)
OM&M 2011 Annual Report
Ventron/Velsicol Superfund Site Operable Unit One
Wood-Ridge, NJ



Appendix E – General Site Inspection Form

Operation, Maintenance and Monitoring (OM and M) Inspection Form
Ventron/Veliscol Superfund Site Operable Unit 1
Wood-Ridge and Carlstadt, New Jersey

Inspector: CHARLES STROTZ

Organization: PARSONS

Date: TUE MAR 15, 2011

Weather: M. SUNNY, MID 40'S

I. Inspection Items

Task A - General Site Inspection

A1. General Site Conditions

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
House Keeping	X			X
Access Roads	X			X
Signage				
Ethel Boulevard				
Randolph Products Property	X		X	

NONE

Remarks/Deficiencies:
MOVE SIGNAGE FROM RANDOLPH PROPERTY TO ETHEL BLVD. ENTRANCE

A2. Site Security

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Perimeter Chain Link Fencing	X			X
Gates and Locks				
Ethel Boulevard	X			X
Randolph Property - NONE				

-NO ACCESS FROM RANDOLPH PROPERTY HARD FENCE INSTALLED WEST DITCH.

Remarks/Deficiencies:

A3. Erosion and Sedimentation Control Inspection

See attached SWPPP Erosion and Sedimentation Control Form.

A4. Storm Water Controls

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Developed Area				
Pavement	X			X
Rip-rap	X			X
Swales	X			X
Culverts	X			X
Roof Drains	X			X
Undeveloped Area				
Cap Grades	X		X	
Berm	X		X	
Rip-rap	X		X	
Vegetation		X	X	
Swales	X			X
Culverts	X			X
Tide Gate Valves	X			X

SEE BERGEN COUNTY SCD FINAL INSPECTION PUNCH LIST

A4. Storm Water Controls (cont.)

Type, location and extent of damaged stormwater control(s):

WASHOUTS AT CAP SLOPES TO SILT FENCE
REPAIRS REQUIRED TO SILT FENCE

Description of area(s) exhibiting excessive ponding, erosion, improper drainage, blockage, and/or sediment buildup :

CAP DRAINAGE BERM SWALE PONDING WATER AT EAST END
BERGEN COUNTY SCD PRE FINAL INSPECTION PUNCH LIST ITEM #4
NO VEGITATION ON CAP OUTSIDE OFF 55' BUFFER ZONE

Task B - Developed Area Caps Inspection

B1. Wolf Warehouse Concrete Capping

Inspect warehouse foundation floor and exterior concrete cap for cracking, spalling, holes, or deterioration that affects the protectiveness of the cap or allows for water or vapor intrusion.

	Condition		Maintenance Required		
	Acceptable:	Unacceptable:	Yes:	No:	
Warehouse Floor Slab	☐	☐	☐	☐	– NO ACCESS
Perimeter Concrete Cap	☒	☐	☐	☒	

Type, location and extent of damage. Include dimensions:

NO CRACKS IN CONCRETE CAPPING THAT AFFECT CAP PERFORMANCE

B2. Other Capping

Monitor general conditions of the various cap types specified below for protection against contact with underlying soils.

	Condition		Maintenance Required	
	Acceptable:	Unacceptable:	Yes:	No:
EJB Property				
Asphalt Pavement	☒	☐	☐	☒
U.S. Life Property				
Asphalt Pavement	☒	☐	☐	☒
Railroad Siding	☒	☐	☐	☒
Concrete Cap	☐	☐	☐	☐
Ethel Boulevard				
Asphalt Pavement	☒	☐	☐	☒
Norfolk Southern Railroad Spur				
Railroad Siding	☒	☐	☐	☒

Type, location and extent of damage. Include dimensions:

NONE OTHER THAN MINOR POT HOLES, NOT AFFECTING PERFORMANCE OF ASPHALT PAVING

Task C - Undeveloped Area Cap Inspection

C1. Differential Settlement

Monitor for damage attributed to settlement of the soil capping system.

Settlement Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☒	☐

SEE E&S INSPECTION
WASHOUTS ON
CAP EDGE UPHILL
OF SILT FENCE

Type, location and extent of damage. Include dimensions and stratum of soil capping system impacted:

C2. Burrowing Wildlife

Monitor for damage attributed to burrowing or digging wildlife. Indicators include surface penetrations, soil piles from burrowing, irregular disturbances of shallow soils (commonly indicative of moles), and surface disturbances such as digging indicative of larger animals (such as groundhogs).

Disturbance Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Digging Wildlife Observed		Animal Habitation Observed	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

C3. Undesirable Vegetation

Monitor for undesirable trees, shrubs, and other invasive species (i.e. phragmites).

Invasive Species Observed		Removal Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location, and extent of undesirable vegetation observed:
DATE OF INSPECTION IN LATE WINTER
CAP VEGETATION HAS NOT BEEN OBSERVED

C4. Unauthorized Vehicle or Equipment Traffic

Monitor for damage attributed to unauthorized vehicles or equipment operating on the soil capping system.

Damage Observed	
Yes:	No:
☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

Task D - Vertical Hydraulic Barrier Wall Inspection

D1. Damage from Vehicle Traffic

Monitor for damage attributed to vehicle or equipment traffic operating.

Damage Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D2. Differential Settlement

Monitor for damage attributed to settlement of the vertical barrier wall or capping system.

Settlement Observed		Maintenance/Repair Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D3. Underground Collection Tank Level Monitoring

Tanks require water disposal coordination if filled greater than 70% of capacity.

Damage Observed	
Yes:	No:
☐	☒

Remarks/Water Level Measurements:
MEASUREMENT FROM MARK IN 2.0 FEET
TANKS FULL, PUMPOUT SCHEDULED

D4. Monitoring Well and Piezometers

Ground water monitoring information will be reported on the attached monitoring log.

ALL WELLS & PIEZOMETERS IN ACCEPTABLE CONDITION

III. Attachments

A. Photos Yes: ☐ No: ☒
Description:

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ ~~No: ☒~~
Description:
SWPPP Erosion and Sedimentation Control Form

Signature of Inspector

Operation, Maintenance and Monitoring (OM and M) Inspection Form
Ventron/Velsicol Superfund Site Operable Unit 1
Wood-Ridge and Carlstadt, New Jersey

Inspector: S. Monte
Organization: PARSONS
Date: 6/30/11
Weather: SUNNY 80's

I. Inspection Items

Task A - General Site Inspection

A1. General Site Conditions

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
House Keeping	X			X
Access Roads	X			X
Signage				
Ethel Boulevard	X			X
Randolph ~~Randolph Products Property~~ *	X			X

Remarks/Deficiencies:
Inspector Did not enter property

A2. Site Security

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Perimeter Chain Link Fencing	X			X
Gates and Locks				
Ethel Boulevard	X			X
Randolph ~~Randolph Property~~ *	X			X

Remarks/Deficiencies: * inspector did not Enter property

A3. Erosion and Sedimentation Control Inspection

See attached SWPPP Erosion and Sedimentation Control Form.

A4. Storm Water Controls

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Developed Area				
Pavement	X			X
Rip-rap	X			X
Swales	X			X
Culverts	X			X
Roof Drains	X			X
Undeveloped Area				
Cap Grades	X		X	~~X~~
Berm	X			X
Rip-rap	X			X
Vegetation	X			X
Swales	X			X
Culverts	X			X
Tide Gate Valves	X			X

A4. Storm Water Controls (cont.)

Type, location and extent of damaged stormwater control(s):

West Creek Duck valves clear
Cap grade: Erosion on steep slopes of cap near Silt Fence

Description of area(s) exhibiting excessive ponding, erosion, improper drainage, blockage, and/or sediment buildup :

Ponding occurring in small areas along berm
Erosion in some areas at edge of cap

Task B - Developed Area Caps Inspection

B1. Wolf Warehouse Concrete Capping

Inspect warehouse foundation floor and exterior concrete cap for cracking, spalling, holes, or deterioration that affects the protectiveness of the cap or allows for water or vapor intrusion.

	Condition		Maintenance Required	
	Acceptable:	Unacceptable:	Yes:	No:
Warehouse Floor Slab ⊛	☐	☐	☐	☐
Perimeter Concrete Cap *	☒	☐	☐	☒

Type, location and extent of damage. Include dimensions:

* Slight surface cracking on concrete cap
⊛ inspector did not enter property

B2. Other Capping

Monitor general conditions of the various cap types specified below for protection against contact with underlying soils.

	Condition		Maintenance Required	
	Acceptable:	Unacceptable:	Yes:	No:
EJB Property				
Asphalt Pavement	[x]	[ ]	[ ]	[x]
U.S. Life Property				
Asphalt Pavement *	[x]	[ ]	[ ]	[x]
Railroad Siding	[x]	[ ]	[ ]	[x]
Concrete Cap	[x]	[ ]	[ ]	[x]
Ethel Boulevard				
Asphalt Pavement	[x]	[ ]	[ ]	[x]
Norfolk Southern Railroad Spur				
Railroad Siding ⊛	[x]	[ ]	[ ]	[x]

Type, location and extent of damage. Include dimensions:

* Areas in asphalt where recent Excavation Activity occurred near surface drain
⊛ Debris and garbage accumulating along R.R. Siding

Task C - Undeveloped Area Cap Inspection

C1. Differential Settlement

Monitor for damage attributed to settlement of the soil capping system.

Settlement Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
[ ]	[x]	[x]	[ ]

Type, location and extent of damage. Include dimensions and stratum of soil capping system impacted:

Small areas around property showing signs of Erosion and will need to be addressed.

C2. Burrowing Wildlife

Monitor for damage attributed to burrowing or digging wildlife. Indicators include surface penetrations, soil piles from burrowing, irregular disturbances of shallow soils (commonly indicative of moles), and surface disturbances such as digging indicative of larger animals (such as groundhogs).

Disturbance Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Digging Wildlife Observed		Animal Habitation Observed *	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

* wildlife previously observed are geese And (1) Turtle. Turtle was deceased when viewed.

C3. Undesirable Vegetation

Monitor for undesirable trees, shrubs, and other invasive species (i.e. phragmites).

Invasive Species Observed		Removal Required	
Yes:	No:	Yes:	No:
☒	☐	☒	☐

Type, location, and extent of undesirable vegetation observed:

Small areas of Phragmites along creek

C4. Unauthorized Vehicle or Equipment Traffic

Monitor for damage attributed to unauthorized vehicles or equipment operating on the soil capping system.

Damage Observed	
Yes:	No:
☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

Task D - Vertical Hydraulic Barrier Wall Inspection

D1. Damage from Vehicle Traffic

Monitor for damage attributed to vehicle or equipment traffic operating.

Damage Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D2. Differential Settlement

Monitor for damage attributed to settlement of the vertical barrier wall or capping system.

Settlement Observed		Maintenance/Repair Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D3. Underground Collection Tank Level Monitoring

Tanks require water disposal coordination if filled greater than 70% of capacity.

Damage Observed	
Yes:	No:
☐	☒ *

Remarks/Water Level Measurements:

Water Removed From tanks on 6/29 & 6/30/11
* Silt (1-3 inches) at bottom of Tanks

D4. Monitoring Well and Piezometers

Ground water monitoring information will be reported on the attached monitoring log.

III. Attachments

A. Photos Yes: ☒ No: ☐
Description: Current site conditions Photos

B. Sketches: Yes: ☐ No: ☒
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description:
SWPPP Erosion and Sedimentation Control Form

Signature of Inspector

Inspector: S. Monte

Organization: Parsons

Date: 9/20/11

Weather: Rain

I. Inspection Items

Task A - General Site Inspection

A1. General Site Conditions

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
House Keeping	X		X *	
Access Roads	X			X
Signage				
Ethel Boulevard	X			X
Randolph Products Property				

Remarks/Deficiencies:
* Turbidity boom needs to be Repositioned At site. moved with heavy rains.

A2. Site Security

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Perimeter Chain Link Fencing	X			X
Gates and Locks				
Ethel Boulevard	X			X
* Randolph Property				

Remarks/Deficiencies:
* Activity At Randolph property, dumptrucks And heavy Equipment
Soil with Strong odor

A3. Erosion and Sedimentation Control Inspection

See attached SWPPP Erosion and Sedimentation Control Form.

A4. Storm Water Controls

	Condition: Acceptable	Condition: Unacceptable	Maintenance Required: Yes	Maintenance Required: No
Developed Area				
Pavement	X			X
Rip-rap	X			X
Swales	X			X
Culverts	X			X
Roof Drains	X			X
Undeveloped Area				
Cap Grades	X			X
Berm	X			X
Rip-rap	X			X
* Vegetation	X		X	
Swales	X			X
Culverts	X			X
* ** Tide Gate Valves	X		X	

* Vegetation growth is good. Spot Areas need Top Soil And seed.

** west Ditch tidegate Requires weekly cleaning.

A4. Storm Water Controls (cont.)

Type, location and extent of damaged stormwater control(s):

Not Applicable

Description of area(s) exhibiting excessive ponding, erosion, improper drainage, blockage, and/or sediment buildup :

Various areas around the site show signs of Erosion. Plan for repairs include Top soil, seed and Erosion matting

Task B - Developed Area Caps Inspection

B1. Wolf Warehouse Concrete Capping

Inspect warehouse foundation floor and exterior concrete cap for cracking, spalling, holes, or deterioration that affects the protectiveness of the cap or allows for water or vapor intrusion.

	Condition		Maintenance Required	
	Acceptable:	Unacceptable:	Yes:	No:
* Warehouse Floor Slab	☐	☐	☐	☐
** Perimeter Concrete Cap	☑	☐	☐	☑

Type, location and extent of damage. Include dimensions:

* unable to access building

** Surficial cracking around perimeter concrete cap.

B2. Other Capping

Monitor general conditions of the various cap types specified below for protection against contact with underlying soils.

	Condition		Maintenance Required	
	Acceptable:	Unacceptable:	Yes:	No:
1. EJB Property				
Asphalt Pavement	☒	☐	~~☒~~	☒
2. U.S. Life Property				
Asphalt Pavement	☒	☐	☐	☒
Railroad Siding	☒	☐	☐	☒
Concrete Cap	☒	☐	☐	☒
3. Ethel Boulevard				
Asphalt Pavement	☒	☐	☐	☒
4. Norfolk Southern Railroad Spur				
Railroad Siding	☒	☐	☐	☒

Type, location and extent of damage. Include dimensions:

1. Asphalt has potholes and cracks.

2. Concrete has superficial cracking, Asphalt has potholes and cracking

3. Ethel Blvd: good condition, some depressions

4 Only surface debris (trash) present

Task C - Undeveloped Area Cap Inspection

C1. Differential Settlement

Monitor for damage attributed to settlement of the soil capping system.

Settlement Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☒	☐

Type, location and extent of damage. Include dimensions and stratum of soil capping system impacted:

Various areas across site. Damage varies from minor erosion to deep cuts in cap.

C2. Burrowing Wildlife

Monitor for damage attributed to burrowing or digging wildlife. Indicators include surface penetrations, soil piles from burrowing, irregular disturbances of shallow soils (commonly indicative of moles), and surface disturbances such as digging indicative of larger animals (such as groundhogs).

Disturbance Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Digging Wildlife Observed		Animal Habitation Observed	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

Past inspections observed burrowing wildlife on or on the perimeter of the site. No burrowing animals witnessed during current inspection.

C3. Undesirable Vegetation

Monitor for undesirable trees, shrubs, and other invasive species (i.e. phragmites).

Invasive Species Observed		Removal Required	
Yes:	No:	Yes:	No:
☒	☐	☒	☐

Type, location, and extent of undesirable vegetation observed:

West Ditch minor phragmites growth.
Black Laurels removed during previous inspections.

C4. Unauthorized Vehicle or Equipment Traffic

Monitor for damage attributed to unauthorized vehicles or equipment operating on the soil capping system.

Damage Observed	
Yes:	No:
☒	☐

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

Ruts on berm from recent vehicle use on site.

Task D - Vertical Hydraulic Barrier Wall Inspection

D1. Damage from Vehicle Traffic

Monitor for damage attributed to vehicle or equipment traffic operating.

Damage Observed		**Grading or Backfill Required**	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D2. Differential Settlement

Monitor for damage attributed to settlement of the vertical barrier wall or capping system.

Settlement Observed		**Maintenance/Repair Required**	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

D3. Underground Collection Tank Level Monitoring

Tanks require water disposal coordination if filled greater than 70% of capacity.

Damage Observed	
Yes:	No:
☐	☒

Remarks/Water Level Measurements:

TANK 1 2.18 Ft From inner Ring of manhole
TANK 2 2.05 Ft " " "

D4. Monitoring Well and Piezometers

Ground water monitoring information will be reported on the attached monitoring log.

III. Attachments

A. Photos Yes: ☒ No: ☐
Description:

B. Sketches: Yes: ☐ No: ☐
Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐
Description:
SWPPP Erosion and Sedimentation Control Form

Signature of Inspector

Inspector: S. Monte
Organization: Parsons
Date: 12/2
Weather: Sunny/Clear

I. Inspection Items

Task A - General Site Inspection

A1. General Site Conditions

	Condition: Acceptable:	Condition: Unacceptable:	Maintenance Required: Yes:	Maintenance Required: No:
House Keeping	X			
Access Roads	X			
Signage				
Ethel Boulevard	X			
Randolph Products Property	✓			

Remarks/Deficiencies:

Site in good condition.

A2. Site Security

	Condition: Acceptable:	Condition: Unacceptable:	Maintenance Required: Yes:	Maintenance Required: No:
Perimeter Chain Link Fencing	X			
Gates and Locks				
Ethel Boulevard	X			
Randolph Property	X			

Remarks/Deficiencies:

All Fencing in good condition. No repairs needed

A3. Erosion and Sedimentation Control Inspection

See attached SWPPP Erosion and Sedimentation Control Form.

A4. Storm Water Controls

	Condition: Acceptable:	Condition: Unacceptable:	Maintenance Required: Yes:	Maintenance Required: No:
Developed Area				
Pavement	X			
Rip-rap	X			
Swales	X			
Culverts	X			
Roof Drains	X			
Undeveloped Area				
Cap Grades	X			
Berm	X			
Rip-rap	X			
Vegetation	X			
Swales	X			
Culverts	X			
Tide Gate Valves	X			

A4. Storm Water Controls (cont.)

Type, location and extent of damaged stormwater control(s):

N/A
- vegetation growing well
- Erosion control in good condition

Description of area(s) exhibiting excessive ponding, erosion, improper drainage, blockage, and/or sediment buildup :

N/A
- Site drainage good.
- No signs of Erosion

Task B - Developed Area Caps Inspection

B1. Wolf Warehouse Concrete Capping

Inspect warehouse foundation floor and exterior concrete cap for cracking, spalling, holes, or deterioration that affects the protectiveness of the cap or allows for water or vapor intrusion.

	Condition		Maintenance Required		
	Acceptable:	Unacceptable:	Yes:	No:	
Warehouse Floor Slab	☐	☐	☐	☐	unable to inspect.
Perimeter Concrete Cap	☒	☐	☒	☐	

Type, location and extent of damage. Include dimensions:

- Minor superficial cracking on perimeter concrete cap.

B2. Other Capping

Monitor general conditions of the various cap types specified below for protection against contact with underlying soils.

	Condition		Maintenance Required		
	Acceptable:	Unacceptable:	Yes:	No:	
EJB Property					
Asphalt Pavement	[X]	[ ]	[ ]	[X]	minor ponding
U.S. Life Property					
Asphalt Pavement	[X]	[ ]	[ ]	[ ]	
Railroad Siding	[X]	[ ]	[ ]	[ ]	
Concrete Cap	[X]	[ ]	[ ]	[ ]	
Ethel Boulevard					
Asphalt Pavement	[✓]	[ ]	[ ]	[ ]	
Norfolk Southern Railroad Spur					
Railroad Siding	[X]	[ ]	[ ]	[ ]	

Type, location and extent of damage. Include dimensions:

EJB - minor ponding of water

US Life - Recent work on Railroad siding. new Asphalt. Track raised according to warehouse manager

Ethel Blvd - minor potholes, good condition

Norfolk - Garbage near tracks and in brush. No modification to area observed.

Task C - Undeveloped Area Cap Inspection

C1. Differential Settlement

Monitor for damage attributed to settlement of the soil capping system.

Settlement Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
[ ]	[X]	[ ]	[X]

Type, location and extent of damage. Include dimensions and stratum of soil capping system impacted:

Site in good condition, Recent repairs and erosion mat installation in good condition, new seed growing across site in repair areas.

C2. Burrowing Wildlife

No signs of burrowing wildlife during inspection

Monitor for damage attributed to burrowing or digging wildlife. Indicators include surface penetrations, soil piles from burrowing, irregular disturbances of shallow soils (commonly indicative of moles), and surface disturbances such as digging indicative of larger animals (such as groundhogs).

Disturbance Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Digging Wildlife Observed		Animal Habitation Observed	
Yes:	No:	Yes:	No:
☐	☒	☒	☐

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

geese are resident animals. No other animals witnessed regularly on site

C3. Undesirable Vegetation

Monitor for undesirable trees, shrubs, and other invasive species (i.e. phragmites).

Invasive Species Observed		Removal Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location, and extent of undesirable vegetation observed:

No invasive species observed on cap area.

C4. Unauthorized Vehicle or Equipment Traffic

Monitor for damage attributed to unauthorized vehicles or equipment operating on the soil capping system.

Damage Observed	
Yes:	No:
☐	☒

Type, location and extent of disturbance. Include dimensions and stratum of soil capping system impacted:

No site traffic besides known activity.
Site remains locked at all times

Task D - Vertical Hydraulic Barrier Wall Inspection

D1. Damage from Vehicle Traffic

Monitor for damage attributed to vehicle or equipment traffic operating.

Damage Observed		Grading or Backfill Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

N/A

D2. Differential Settlement

Monitor for damage attributed to settlement of the vertical barrier wall or capping system.

Settlement Observed		Maintenance/Repair Required	
Yes:	No:	Yes:	No:
☐	☒	☐	☒

Type, location and extent of damage. Include dimensions and estimated barrier wall stationing or building offsets:

NA

D3. Underground Collection Tank Level Monitoring

Tanks require water disposal coordination if filled greater than 70% of capacity.

Damage Observed	
Yes:	No:
☐	☒

Remarks/Water Level Measurements:

2-3 Ft Below top of Manhole

D4. Monitoring Well and Piezometers

Ground water monitoring information will be reported on the attached monitoring log.

III. Attachments

A. Photos Yes: ☒ No: ☐

Description:

B. Sketches: Yes: ☐ No: ☒

Description:

C. Supplemental Inspection Notes/Forms: Yes: ☒ No: ☐

Description:

SWPPP Erosion and Sedimentation Control Form

Signature of Inspector

Appendix F – SWPPP Erosion and Sedimentation Control Inspection Form

3/1/2011
Inspector(s): T. McFarlane, C. Strotz

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed

3/1/2011
Inspector(s): T. McFarlane
C. Strotz

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed

3/1/2011
Inspectors: T. McFarlane
C. Strotz

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.		✓
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
Various sections of silt fence have failed allowing sediment breakthrough and soil erosion w/ rilling

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
N/A - Not installed.

3/1/2011
Inspectors: T. McFarlane
C. Strotz

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Regrade and reseed areas subject to erosion and/or ponding

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		X
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	X	
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	X	
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	X	
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	X	
6. Have stream crossings been constructed entirely of non-erodible material?	X	
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	X	

3/10/2011
Inspector: T. McFarlane
Weather: Light Rain, 45°

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not Installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.		X
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
Various sections of silt fencing need to be repaired/ and or re-buried.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
N/A - Not installed.

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-seed and/or regrade areas subject to erosion and/or ponding.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		X
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	X	
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	X	
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	X	
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	X	
6. Have stream crossings been constructed entirely of non-erodible material?	X	
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	X	

CHARLES STREET
3/15/2011

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

N/A

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	X	☐
2. Is the stone 2-inch diameter?	X	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	X	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NONE SITE ENTRANCE AND TEMPORARY ROADWAY IN ACCEPTABLE CONDITION

SEE BCSCD PUNCH LIST ITEM 4.

SEDIMENT PONDS

N/A

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? NOTE: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

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SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.		X
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

SILT FENCE REPAIRS REQUIRED

INLET PROTECTION

Key things to look for ...

N/A

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

PERMANENT STABILIZATION

Key things to look for ...

NO VEGITATION ON CAP EXCEPT FOR 55' BUFFER ZONE

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate UNKNOWN		
4. If rainfall has been inadequate, are seeded areas being watered?		
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	X
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	X
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?			N/A

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

5) SEE BCSCA INSPECTION PUNCH LIST ITEM 3

6) SEE BCSCA INSPECTION PUNCH LIST ITEM 1

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

N/A

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

3/25/11
Inspector: Robert Swabsin
Weather: Partly Sunny, 35°-40°

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable - no sediment ponds installed

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

None - Note that silt fence was repaired and sections re-installed on 3/24/11 & 3/25/11

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Installed

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-seeding required for Undeveloped Area

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. Not Applicable (N/A)		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

Date: 3/29/11
Inspector: T. McFarlane
Weather: Sunny, 50s, windy

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

No repairs necessary at time of inspection.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - not installed.

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?		X
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stablized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-seeding and watering required for undeveloped areas.

Reinstall erosion matting on NW portion of berm.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

Date: 4/5/2011
Inspector: T. McFarlane
Weather: Raining + 60s

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

No repairs necessary at time of inspection.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A. Not installed.

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	☒	☐
2. Has the soil been properly prepared to accept permanent seeding?	☒	☐
3. Has seed and mulch been applied at the appropriate rate.	☒	☐
4. If rainfall has been inadequate, are seeded areas being watered?	☒	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	☒	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	☒	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	☒	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	☒	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Regrade and reseed areas w/ rilling and erosion.

Reinstall erosion matting on NW portion of berm.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material? N/A.	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A	☐	☐

Inspector: T. McFarlane
4/12/2011
Weather: Raining, 50s

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not Installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

No repairs necessary @ time of inspection.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed.

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-grade & reseed areas susceptible to rilling & erosion. Reinstall erosion matting on berm.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

Inspector: T. McFarlane
Date: 4/19/2011
Weather: Rain + 50's

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not Installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?		✓
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.		X
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Reattach fallen silt fencing to posts.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Installed.

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Regrade & reseed all areas susceptible to rilling and/or ponding. Reinstall erosion matting on berm.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

Inspector: T. McFarlane
Weather: Sunny, 80°F
Date: 4/26/2017

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not Applicable.

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?		X
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.		X
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-attach fallen silt fencing in areas shown in photolog.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A- Not applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-grade & re-seed all areas where erosion has occurred.
Clear erosion matting on berm of sediments.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A.		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

5/10/11
Inspector: Robert Swabsin
Weather: Partly Sunny, 60°

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?		
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?		
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?		
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?		
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?		
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?		
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?		
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?		
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?		
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?		
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.		
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?		
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?		
14.	Was the basin installed prior to grading the site?		
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable - no sediment ponds installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not installed / Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Additional seeding needed for Undeveloped Area. This Area shall be re-seeded on 5/16 & 5/17/11

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. Not applicable (N/A)		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

5/19/11
Inspector: Samuel Monte
Weather: Overcast / Light Rain / Fog 60°

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not applicable - no sediment Ponds installed

SILT FENCE

Key things to look for ...

	Yes	No	
1. Is the fence at least 4" to 6" into the ground?	☐	☒	A
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	☒	☐	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	☒	☐	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	☒	☐	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	☒	☐	
6. Have all the gaps and tears in the fence been eliminated.	☐	☒	B
7. Is the fence controlling an appropriate drainage area?	☒	☐	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

A Heavy Rain caused under Flow in some Areas

B Heavy Rain caused tears in Fence that need Repair.

Broken support stakes

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not installed /not applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Additional Seeding planned for 5/20 and 5/23.

Some Regrading necessary due to recent Rains

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. NA		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	X	
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? NA		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. NA		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? NA		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. NA		

2. Dumpster on site From 5/10 - 5/16 For trash disposal

SECTION 6

EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE

6.1 INSPECTIONS

During the construction period, routine inspections will be performed by the Contractor and, at a minimum, one other person knowledgeable of the pollution prevention control methods and procedures. Regular, weekly inspections will be performed and the results of those inspections will be recorded on an Inspection Report Form (**Attachment D**). Additional inspections will be performed on storm water, sediment and erosion control measures within 24 hours of a rainfall event of ½ inch or more. Any discovered deficiencies will be corrected within 24 hours of the Inspection Report. Records of these inspections will be maintained at the Site with the SWP3.

6.2 MAINTENANCE

As stated throughout this plan, measures and controls will be installed and maintained in good working order, and repairs or corrections will be initiated and provided for within 24 hours of the Inspection Report.

Sediment will be removed from the silt fences when it has reached a height no greater than 1/3 to the top of the fences. Silt fences, sediment logs and other sediment control devices will be repaired or replaced if loose or damaged posts, tears in the fabric, loose or unsecured fabric or any other deficiencies are noted during the inspection process. Sediment in any other control measure will be removed when sediment reaches 1/3 its effective height, as recommended by the vendor, and/or as directed by the Contractor.

Stabilized construction access/egress shall be monitored, and sediment and debris removed when the stone at the access/egress becomes covered or clogged with sediment. Removal of some of the stone and replacement with clean stone may also be required periodically. At access/egress areas, bare spots and washouts along slopes and other degraded areas of the Site will be repaired, reseeded and/or re-stabilized as required.

Post-construction maintenance, landscaping, erosion and storm water controls at the Site will be the responsibility of the property owner.

5/26/11
Sam Moake

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X A	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

A: Silt Fence Repairs made . Additional Fence Added

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Additional seed Applied on 5/20 and 5/26. Seed installation complete

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

6/2/2011

by: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SILT FENCE

Key things to look for ...

	Yes	No	
1. Is the fence at least 4" to 6" into the ground?		X	A
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	~~X~~	X	B
* 3. Is the fence pulled tight so it won't sag when water builds up behind it?	X		
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X		
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X		
6. Have all the gaps and tears in the fence been eliminated.	X		
7. Is the fence controlling an appropriate drainage area?	X		

* Some areas are showing signs of wear and tear. Point repairs will be necessary in the future

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

A: Areas have pulled out of the ground due to hot weather and dry conditions. Repairs made on 6/2/2011.

B: Areas with little soil cover at base was addressed and backfilled

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate.	✓	
4. If rainfall has been inadequate, are seeded areas being watered? N/A		
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stablized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Large geese population onsite since hydro seed application may damage new growth.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

6/9/2011

by: Sam Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

None on site

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.		✓
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor silt fence repairs needed. Repairs will be made on 6/10/2011

* Repairs complete on 6/10/2011

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate.	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

RAINFALL has been very low at site Signs of Heat Stressed vegetation

* 6/10/2011 overnight RAIN At Site

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

Not Applicable

6/15/2011

by: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor Silt fence Repairs And adjustments made during the inspection

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Site vegetation is growing. Vegetation growing through Erosion mats in most Areas.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

Inspector: T. McFarlane
Weather: Rain + 70s
Date: 6/23/2011

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? NOTE: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not installed.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?		X
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.		X
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Re-install fallen silt fencing

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A - Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? NOTE: Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Regrade + re-seed areas where erosion has accured.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain. N/A		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site. N/A		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain? N/A		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers. N/A		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain? N/A		
6. Have stream crossings been constructed entirely of non-erodible material? N/A		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? NOTE: If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground. N/A		

6/30/2011

by: S. Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Silt Fence Repairs made on 6/29 & 6/30/11

16 stakes added to support Areas. Soil Removed

From base of Fence in many Areas

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Large Amount of vegetation growing on site

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

7/8/2011 by S Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/8/2011

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/18/2017

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	Y	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor Repair to silt Fence. No major Damage.
Good Supply of Replacement silt Fence on site
in Storage box

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/8/2011

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?		X
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
Vegetation Filling in. Stressed From heat in most Areas. Little RAINFALL over PAST 2 weeks.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

7/14/10 Sam Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/14/11

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

7/14/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor Silt Fence Repairs made. Animal burrow near west Ditch through Silt Fence.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/14/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:
Deep soil Erosion cut on property. Vegetation Stressed From heat and Dry conditions. Growth through Erosion mats Along berm Filling in.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

7/19/11

by Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

7/19/11

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/19/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	☐	☐
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	☐	☐
3. Is the fence pulled tight so it won't sag when water builds up behind it?	☐	☐
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	☐	☐
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	☐	☐
6. Have all the gaps and tears in the fence been eliminated.	☐	☐
7. Is the fence controlling an appropriate drainage area?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Silt Fence in good condition. Few minor Repairs.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/29/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	☑	☐
2. Has the soil been properly prepared to accept permanent seeding?	☑	☐
3. Has seed and mulch been applied at the appropriate rate	☑	☐
4. If rainfall has been inadequate, are seeded areas being watered?	☑	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	☑	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	☑	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	☑	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	☑	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation stressed due to lack of Rain.

Vegetation in 85 ft Buffer stressed. Few Areas with large rills. ~~old t~~

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

NA

Old Erosion mat from west Ditch Removed from ditch and Placed in Erosion channel.

7/28/11

by - Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/28

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

7/28

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor silt fence repairs. Stakes added to fence line.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

7/28/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	☐
2. Has the soil been properly prepared to accept permanent seeding?	✓	☐
3. Has seed and mulch been applied at the appropriate rate	✓	☐
4. If rainfall has been inadequate, are seeded areas being watered?	✓	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation Growing well. Few stressed Areas. Burrowing Animal Evidence in area.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

8/2/11

by: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

8/2/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

8/2/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	☐
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	☐
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	☐
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	☐
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	☐
6. Have all the gaps and tears in the fence been eliminated.	✓	☐
7. Is the fence controlling an appropriate drainage area?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor silt fence repairs made. Soil removed from fence in some areas.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

8/2/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

vegetation showing consistent growth across site. Some areas ~~near~~ sw along south/south boarder need to be reseeded.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

* Roy Otto (Berger county) on site for inspection.
* Signs of Burrowing Animals onsite.
* Large amounts of Biomass in west Ditch storm grate.

SECTION 6

EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE

6.1 INSPECTIONS

During the construction period, routine inspections will be performed by the Contractor and, at a minimum, one other person knowledgeable of the pollution prevention control methods and procedures. Regular, weekly inspections will be performed and the results of those inspections will be recorded on an Inspection Report Form (**Attachment D**). Additional inspections will be performed on storm water, sediment and erosion control measures within 24 hours of a rainfall event of ½ inch or more. Any discovered deficiencies will be corrected within 24 hours of the Inspection Report. Records of these inspections will be maintained at the Site with the SWP3.

6.2 MAINTENANCE

As stated throughout this plan, measures and controls will be installed and maintained in good working order, and repairs or corrections will be initiated and provided for within 24 hours of the Inspection Report.

Sediment will be removed from the silt fences when it has reached a height no greater than 1/3 to the top of the fences. Silt fences, sediment logs and other sediment control devices will be repaired or replaced if loose or damaged posts, tears in the fabric, loose or unsecured fabric or any other deficiencies are noted during the inspection process. Sediment in any other control measure will be removed when sediment reaches 1/3 its effective height, as recommended by the vendor, and/or as directed by the Contractor.

Stabilized construction access/egress shall be monitored, and sediment and debris removed when the stone at the access/egress becomes covered or clogged with sediment. Removal of some of the stone and replacement with clean stone may also be required periodically. At access/egress areas, bare spots and washouts along slopes and other degraded areas of the Site will be repaired, reseeded and/or re-stabilized as required.

Post-construction maintenance, landscaping, erosion and storm water controls at the Site will be the responsibility of the property owner.

8/16/11 RAIN/OVERCAST

By: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Numerous repairs made on silt fence. Recent rains caused sediment build-up and damage.

Stakes added and soil shoveled away from fence.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation showing good growth with recent rain, still bare areas that need to be addressed.

Heavy build-up of debris behind west ditch tide gate was removed.

Visual tire marks on berm near Berry's Creek caused ruts on east side of berm, repairs not necessary but property owner needs to be notified not to drive over berm.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

Section Not Applicable

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

*NOTE:

West ditch erosion area appears to be somewhat stable even with recent rain. Additional silt fence intact. No additional erosion evident.

SECTION 6

EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE

6.1 INSPECTIONS

During the construction period, routine inspections will be performed by the Contractor and, at a minimum, one other person knowledgeable of the pollution prevention control methods and procedures. Regular, weekly inspections will be performed and the results of those inspections will be recorded on an Inspection Report Form (**Attachment D**). Additional inspections will be performed on storm water, sediment and erosion control measures within 24 hours of a rainfall event of ½ inch or more. Any discovered deficiencies will be corrected within 24 hours of the Inspection Report. Records of these inspections will be maintained at the Site with the SWP3.

6.2 MAINTENANCE

As stated throughout this plan, measures and controls will be installed and maintained in good working order, and repairs or corrections will be initiated and provided for within 24 hours of the Inspection Report.

Sediment will be removed from the silt fences when it has reached a height no greater than 1/3 to the top of the fences. Silt fences, sediment logs and other sediment control devices will be repaired or replaced if loose or damaged posts, tears in the fabric, loose or unsecured fabric or any other deficiencies are noted during the inspection process. Sediment in any other control measure will be removed when sediment reaches 1/3 its effective height, as recommended by the vendor, and/or as directed by the Contractor.

Stabilized construction access/egress shall be monitored, and sediment and debris removed when the stone at the access/egress becomes covered or clogged with sediment. Removal of some of the stone and replacement with clean stone may also be required periodically. At access/egress areas, bare spots and washouts along slopes and other degraded areas of the Site will be repaired, reseeded and/or re-stabilized as required.

Post-construction maintenance, landscaping, erosion and storm water controls at the Site will be the responsibility of the property owner.

8/23/11 Sunny

By: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Repairs made on silt fence.

Stakes added and soil shoveled away from fence.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation showing good growth with recent rain, still bare areas that need to be addressed.

Heavy build-up of debris behind west ditch tide gate was removed again. More aggressive removal may be necessary.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

Section Not Applicable

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

*NOTE:
West ditch erosion area appears to be somewhat stable even with recent rain. Additional silt fence intact. No additional erosion evident.
Burrowing animal witnessed on railroad tracks

SECTION 6

EROSION AND SEDIMENT CONTROL INSPECTIONS AND MAINTENANCE

6.1 INSPECTIONS

During the construction period, routine inspections will be performed by the Contractor and, at a minimum, one other person knowledgeable of the pollution prevention control methods and procedures. Regular, weekly inspections will be performed and the results of those inspections will be recorded on an Inspection Report Form (**Attachment D**). Additional inspections will be performed on storm water, sediment and erosion control measures within 24 hours of a rainfall event of ½ inch or more. Any discovered deficiencies will be corrected within 24 hours of the Inspection Report. Records of these inspections will be maintained at the Site with the SWP3.

6.2 MAINTENANCE

As stated throughout this plan, measures and controls will be installed and maintained in good working order, and repairs or corrections will be initiated and provided for within 24 hours of the Inspection Report.

Sediment will be removed from the silt fences when it has reached a height no greater than 1/3 to the top of the fences. Silt fences, sediment logs and other sediment control devices will be repaired or replaced if loose or damaged posts, tears in the fabric, loose or unsecured fabric or any other deficiencies are noted during the inspection process. Sediment in any other control measure will be removed when sediment reaches 1/3 its effective height, as recommended by the vendor, and/or as directed by the Contractor.

Stabilized construction access/egress shall be monitored, and sediment and debris removed when the stone at the access/egress becomes covered or clogged with sediment. Removal of some of the stone and replacement with clean stone may also be required periodically. At access/egress areas, bare spots and washouts along slopes and other degraded areas of the Site will be repaired, reseeded and/or re-stabilized as required.

Post-construction maintenance, landscaping, erosion and storm water controls at the Site will be the responsibility of the property owner.

8/29/11 Sunny

By: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NOT APPLICABLE

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Repairs made on silt fence. Silt fence torn away from stakes in numerous areas, repairs made.

Stakes added and soil shoveled away from fence. Damage minimal considering weather event

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation showing good growth with recent rain, still bare areas that need to be addressed.

Gray clay exposed in numerous areas due to heavy rainfall. Will be addressed during upcoming site repairs. Limited site mowing may be necessary prior to site groundwater sampling.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

Section Not Applicable

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

*NOTE:
West ditch erosion area appears to be somewhat stable even with recent rain. Additional silt fence intact. No additional erosion evident.

Boats and orange boom moved by wind and rain. Will need to restaged at a later date.

9/6/11

by: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

9/6

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

9/6

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Minor Repair made, Stakes Added to Silt Fence
- Soil Removed From Silt Fence

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

9/6

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- vegetation growth is good.
- No burrowing Animals noticed near silt Fence

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE**: if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

9/13/11

by: Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

9/13

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

9/13

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

- Minor silt fence repairs made

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Some areas could be replaced

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not applicable

9/13

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?		
3. Has seed and mulch been applied at the appropriate rate		
4. If rainfall has been inadequate, are seeded areas being watered?		
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?		
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.		
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?		
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Areas of soil erosion present. Upcoming site work will address damage areas

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

- No burrowing animals present
- photo taken of site and creek conditions
- Cleanouts appear clear of debris

9/20/11 by SAM Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not applicable

9/20/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation growth doing well. Adequate RAINFAll.
Spot Areas need top soil And Reseeding.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** If you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

Not Applicable

*-No burrowing Animals witnessed
-photos taken of Creek. Low tide not As low As usual.

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor Repairs Across site, Soil buildup, Stakes installed.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Not Applicable

10/4/11
by SiMonte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/4/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

SILT FENCE

10/4/11

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

-New Seed / soil / Hay in good shape

-No major silt fence issues

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

10/4/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate.	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- HAy Added Across site, Seed Added Across Site.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

101 11 / 11

by Samuel Moitte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/11/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/11/01

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

-Silt Fence repairs were minor

-Move hay Bails to slow Surface Flow

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/11/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Added Hay to some areas

Small burrow witnessed

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

- Lock added to boats

10/18/11 by Sam Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/18/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/18/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Minor Repairs made Across Site.
- Silt Removed From Fence Areas

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/28/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

– Cap area vegetation in good shape.

– No repairs needed.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

– Crack repair contractor on site

by Samuel Monte
10/25/11

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/25/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

minor silt fence repairs made. new stakes installed across site.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

10/25/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Site in good shape, Repair areas look good.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

by Sam Monte

11/1/11

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/8/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/1/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	[x]	[ ]
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	[x]	[ ]
3. Is the fence pulled tight so it won't sag when water builds up behind it?	[x]	[ ]
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	[x]	[ ]
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	[x]	[ ]
6. Have all the gaps and tears in the fence been eliminated.	[x]	[ ]
7. Is the fence controlling an appropriate drainage area?	[x]	[ ]

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

– Minor silt fence repairs made across site.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	[ ]	[ ]
2. Has the fabric been replaced when it develops tears or sags?	[ ]	[ ]
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	[ ]	[ ]
4. For yard inlet protection, does the structure encircle the entire grate?	[ ]	[ ]
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	[ ]	[ ]
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	[ ]	[ ]
7. Is sediment that has accumulated around the inlet removed on a regular basis?	[ ]	[ ]

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

11/1/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Sept Repair measures still in place. No new washouts. Hay still in place over seed.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

NA

— Waste water Removed

11/8/11 by Sam Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/8/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/8/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

-Minor Repairs Made across site

-Silt Removed on South Fence

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/8/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	☐
2. Has the soil been properly prepared to accept permanent seeding?	✓	☐
3. Has seed and mulch been applied at the appropriate rate	✓	☐
4. If rainfall has been inadequate, are seeded areas being watered?	✓	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Erosion mat stapling in place well on steep terrain. Vegetation growing.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

N/A

Waste water removed

S/ Monte 11/15/11

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/15/11

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/15/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

– NO Silt Repair Necessary

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

11/15/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Vegetation in new seed areas growing.
- Established vegetation Browning.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

[Added
* Stone ramp installed over berm on 11/18 for work following week]
- Waste water Removed
- MW-11 well redevelopment
- Site walk for stone install potentially on 11/18

11/22/11

Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/22/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	☐
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	☐
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	☐
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	☐
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	☐
6. Have all the gaps and tears in the fence been eliminated.	✓	☐
7. Is the fence controlling an appropriate drainage area?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Minor repairs made Across Site.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

11/22/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- Site vegetation coverage good. Slight growth in ~~[illegible]~~ newly seeded areas

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

- Waste water removed
- Sand placed in Berry's Creek wash out area during the week

12/2/11 by S. Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/2/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/2/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	
6. Have all the gaps and tears in the fence been eliminated.	✓	
7. Is the fence controlling an appropriate drainage area?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- No major or repairs needed. vegetation growing against fence limiting weather damage.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/28/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	
2. Has the soil been properly prepared to accept permanent seeding?	✓	
3. Has seed and mulch been applied at the appropriate rate	✓	
4. If rainfall has been inadequate, are seeded areas being watered?	✓	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Vegetation dead due to season. Erosion matting in place

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

-Found MW-11 offsite N/A

12/6/11 by Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/6/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/6/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	X	
2. Has the soil been properly prepared to accept permanent seeding?	X	
3. Has seed and mulch been applied at the appropriate rate	X	
4. If rainfall has been inadequate, are seeded areas being watered?	X	
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	X	
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	X	
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	X	
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Site in good condition, No Action Required.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.		
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.		
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?		
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.		
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?		
6. Have stream crossings been constructed entirely of non-erodible material?		
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.		

N/A

- GW Sampling

- Waste Removal

12/6/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	X	
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	X	
3. Is the fence pulled tight so it won't sag when water builds up behind it?	X	
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	X	
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	X	
6. Have all the gaps and tears in the fence been eliminated.	X	
7. Is the fence controlling an appropriate drainage area?	X	

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Silt Fence in good condition

No Action required.

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?		
2. Has the fabric been replaced when it develops tears or sags?		
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?		
4. For yard inlet protection, does the structure encircle the entire grate?		
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?		
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.		
7. Is sediment that has accumulated around the inlet removed on a regular basis?		

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

12/13/11 Samuel Monte

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/13/11

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6.	For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7.	Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8.	For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/13/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	☑	☐
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	☑	☐
3. Is the fence pulled tight so it won't sag when water builds up behind it?	☑	☐
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	☑	☐
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	☑	☐
6. Have all the gaps and tears in the fence been eliminated.	☑	☐
7. Is the fence controlling an appropriate drainage area?	☑	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

- No repairs necessary
- Areas sagging in [illegible] surrounded by thick vegetation

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/13/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	✓	☐
2. Has the soil been properly prepared to accept permanent seeding?	✓	☐
3. Has seed and mulch been applied at the appropriate rate	✓	☐
4. If rainfall has been inadequate, are seeded areas being watered?	✓	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	✓	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	✓	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	✓	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

~ Vegetation Browning From weather.

- No washed ~~[illegible]~~ witnessed.

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

N/A

— No waste removed

12/20/11

Sam Monte Overcast

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 21 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/20/11

SEDIMENT PONDS

Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	☐	☐
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	☐	☐
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan?	☐	☐
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE:** If not, a baffle should be added to lengthen the distance.	☐	☐
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14. Was the basin installed prior to grading the site?	☐	☐
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

N/A

12/20/11

SILT FENCE

Key things to look for ...

	Yes	No
1. Is the fence at least 4" to 6" into the ground?	✓	☐
2. Is the trench backfilled to prevent runoff from cutting underneath the fence?	✓	☐
3. Is the fence pulled tight so it won't sag when water builds up behind it?	✓	☐
4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?	✓	☐
5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.	✓	☐
6. Have all the gaps and tears in the fence been eliminated.	✓	☐
7. Is the fence controlling an appropriate drainage area?	✓	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

– Minor sagging Around site. Minor repairs needed

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NA

12/20/11

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	☑	☐
2. Has the soil been properly prepared to accept permanent seeding?	☑	☐
3. Has seed and mulch been applied at the appropriate rate	☑	☐
4. If rainfall has been inadequate, are seeded areas being watered?	☑	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	☑	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE:** Rock check dams may be needed to slow the flow of runoff.	☑	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	☑	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	☑	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Site in good condition, vegetation dead due to season. Erosion mat in place

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE:** if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

N/A

- Crack Repair near Wolf warehouse
- WTC photos
- Waste removal 2 Loads